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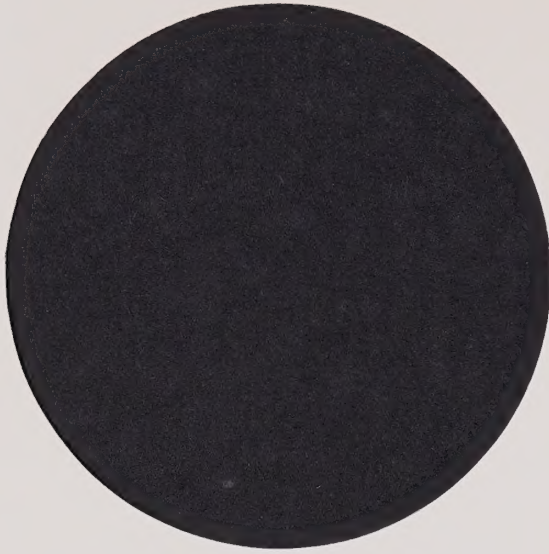
EXECUTIVE SUMMARY

DRAFT 208 PLAN &
DRAFT ENVIRONMENTAL
IMPACT REPORT

*Areawide Waste
Treatment Management
Planning Program*



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The preparation of this report was financed in part through Planning Grant #P0091909-01 from the United States Environmental Protection Agency, under the provisions of Section 208 of the Federal Water Pollution Control Act, as amended.

EXECUTIVE SUMMARY

DRAFT 208 PLAN &
DRAFT ENVIRONMENTAL
IMPACT REPORT

*Water quality management --
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FOREWORD

This report contains Executive Summaries of the draft 208 Areawide Waste Treatment Management Plan for the South Coast planning area and the draft Environmental Impact Report (EIR) for the 208 Plan. The draft EIR and its summary were prepared by the consulting firm of Daniel, Mann, Johnson and Mendenhall (DMJM), with assistance from SCAG staff. Please refer to the full draft 208 Plan Report, the full draft Environmental Impact Report, and supporting documentation, for detailed information on material presented in the Executive Summaries.

The draft 208 Plan was prepared by the Southern California Association of Governments (SCAG) in its capacity as the designated 208 planning agency for the South Coast area, with assistance from eight participating local agencies, the Los Angeles, Santa Ana and San Diego Regional Water Quality Control Boards and several consultants. The plan, prepared pursuant to the Clean Water Act and under the auspices of the California State Water Resources Control Board and U. S. Environmental Protection Agency (EPA) was initiated in November 1976, and was funded in part by a grant from EPA. The plan was prepared under the advisement of the 208 Citizens Advisory and Program Committees and the SCAG Environmental Quality and Resource Conservation Committee, and was formulated in two phases. Phase I constituted problem evaluation and development of program priorities for the initial planning period; Phase II addressed development of water quality management programs for the major program priorities.

The policies, actions and continuing planning process and programs recommended in the plan are complementary to the existing State Regional Water Quality Control Boards' basin plan and regulatory functions. The 208 plan has four basic purposes:

- Providing maximum public involvement and affording local government the opportunity to establish areawide environmental policy and programs;
- Providing for restoration of impaired beneficial uses of waters, and enhancement of water quality to meet the 1983 "fishable and swimmable" goal of the Clean Water Act, and establishing a process to protect water quality;
- Developing and implementing waste treatment management programs for municipal and industrial wastes, residual wastes and nonpoint source wastes;
- Establishing a mechanism in which waste treatment and water quality management can be achieved consistent with growth policies and air quality management programs.

As such, the 208 Plan represents a major step forward for integrated environmental planning and management in the South Coast area of Southern California.

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Foreword	i
Table of Contents.	iii
Executive Summary: Draft 208 Plan	1
Part 1: Water Quality Planning Framework.	2
Part 2: Water Quality Action Plan	5
Part 3: Implementation Plan	22
Executive Summary: Draft Environmental Impact Report.	25
Nonpoint Source Waste Management Plan.	26
Municipal and Industrial Waste Management Plan	27
Water Conservation and Reuse	28
Residual Waste Management Plan	28
Integrated Control Plans - Priority Program for Newport Bay.	28

EXECUTIVE SUMMARY

Introduction

This report is the draft 208 Areawide Waste Treatment Management Plan for the South Coast planning area. The preparation of this plan is mandated by Section 208 of the Clean Water Act. The draft 208 plan has been prepared by the Southern California Association of Governments (SCAG); eight participating local agencies; the Los Angeles, Santa Ana and San Diego Regional Water Quality Control Boards, and consultants over a two year period (beginning November, 1976). It was funded in part by a grant from the U. S. Environmental Protection Agency.

The local agencies who participated in the plan's development, under formal cooperative agreement, are: The City of Los Angeles, the Counties of Los Angeles, Orange, Riverside and San Bernardino, the Newport-Irvine Waste-Management Planning Agency, the Santa Ana Watershed Project Authority and the Ventura Regional County Sanitation District.

The Los Angeles, Santa Ana, and San Diego Regional Water Quality Control Boards have, under formal agreement with SCAG, prepared the following portions of the 208 Plan: water quality assessment and segment classifications; water quality standards; total maximum daily loads; and point source load allocations. The Regional Boards have also assisted in the review of preliminary reports of participating agencies, and have provided general assistance to SCAG staff.

The draft 208 Plan was prepared under the direction and review of SCAG's three Environmental Program Committees: the 208 Citizens Advisory Committee, the 208 Program Committee and the Environmental Quality and Resource Conservation Committee. Ultimate decision-making responsibility for the 208 Plan rests with SCAG's Executive Committee.

A draft Environmental Impact Report (EIR) on the draft plan has been prepared, as required by California law, to aid decision makers and the general public in assessing the potential consequences of carrying out the actions proposed in the draft 208 Plan. Copies are available upon request or for review at selected public libraries throughout the South Coast area.

The draft 208 Plan has three parts: 1) Water Quality Planning Framework, 2) Water Quality Action Plan, and 3) Implementation Plan. This plan report is a condensation of several plan element

reports and many technical appendices prepared by SCAG and participating agencies. The plan element reports and technical appendices contain the supporting information and detailed analyses for policies and actions recommended in the draft 208 Plan. Table E-1 is a cross-reference table of all technical plan element reports and appendices. These reports and appendices are available upon request if additional background material is desired.

Key provisions of the draft 208 Plan for the South Coast area are summarized in the remainder of this Executive Summary.

Part 1: Water Quality Planning Framework

The planning framework section of the plan contains: background information, including descriptions of the planning process, objectives, boundaries and water quality planning priorities for both phases of the 208 planning program (Section 1.1); inventories and projections for population, housing, employment and Land use (Section 1.2); and a discussion of updated water quality standards and water quality assessments prepared by the RWQCB's in cooperation with SCAG (Section 1.3).

Section 1.1: Background Information

The South Coast 208 Planning area boundaries consist of a combination of political and watershed boundaries (see Plate A, Section 1.1). The planning process in this large and complex metropolitan area has been conducted by SCAG, as the designated planning agency, with the assistance of state and local agencies previously mentioned.

In addition to local planning, several on-going state and federal environmental planning programs have also been coordinated with 208 planning. These include: Air Quality Management Planning, Solid Waste Management Planning pursuant to the Resource Conservation and Recovery Act of 1976, 701 Comprehensive Planning, Coastal Zone Management Planning, the Water Action Plan being prepared by the State Department of Water Resources, and planning of the Santa Monica Mountains Comprehensive Planning Commission.

The draft 208 Plan has been developed to achieve the Clean Water Act goal of "fishable, swimmable" waters by 1983. The planning was also guided by a set of 29 areawide policies reviewed by the Environmental Program Committees and approved by the Environmental Quality and Resource Conservation Committee in the Spring of 1978. A public participation program has been conducted by SCAG and participating agencies during the development of the draft 208 Plan. The program was designed to meet regulatory requirements

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Local Government
Claremont Men's College
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Inglewood, California 90301

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Tustin Civic Center
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Tustin, California 92680

Hawthorne Public Library
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Hawthorne, California 90250

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Glendale, California 91205

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Los Angeles, California 90017

Downey City Library
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Downey, California 90241

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Malibu, California 90265

California State University
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Los Angeles, California 90032

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Fullerton, California 92634

Orange County Rapid Transit District
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Santa Ana, California 92702

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University of California
Irvine, California 92713

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Environmental Management Agency
400 Civic Center Drive
Santa Ana, California 92701
Attn: Development Division

Orange County Main Library
11200 Standord Street
Garden Grove, California 92640

Orange Public Library
101 No. Center Street
Orange, California 92666

Huntington Beach Public Library
Reference Department
7111 Talbert Avenue
Huntington Beach, California 92647

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San Bernardino County Library
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San Bernardino, California 92401

Ontario City Library
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Ontario, California 91764

California Department of Transportation
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San Bernardino, California 92403

California State University
San Bernardino Library
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San Bernardino, California 92407

San Bernardino City Library
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San Bernardino, California 92401

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Thousand Oaks, California 91360

Ventura County Library
Services Agency
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Ventura, California 93001

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Indio, California 92201

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Imperial, California 92251

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Sacramento, California 95814

Calif. Department of Transportation
District 11
2829 Juan Street
San Diego, California 92138

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PUBLIC MEETINGS

Workshops

All these workshops will discuss the Air Quality Management Plan, 208 Areawide Waste Treatment Management Plan, SCAG-78 Growth Forecast Policy, Amendments to the Regional Transportation Plan and Environmental Impact Reports.

- Oct. 30 RIVERSIDE COUNTY: 9:00 - 2:00 p.m., Commons, University of California, Riverside
- Nov. 11 LOS ANGELES COUNTY: 9:00 - 12:00 Noon, Rosemead Community Center, 3936 N. Muskatel, Rosemead
- Nov. 15 SAN BERNARDINO COUNTY: 7:00 p.m., Lower Commons, California State College, San Bernardino
- Nov. 17 ORANGE COUNTY: 10:00 - 1:00 p.m., Newport-Harbor-Costa Mesa Board of Realtors, 401 N. Newport Blvd., Newport

Special Workshops

These workshops address the plans as noted:

- Nov. 8 IMPERIAL COUNTY: 7:00 - 9:00 p.m., Chamber of Commerce, 1100 Main St., El Centro (Development Guide & Amendments to the RTP)
- Nov. 14 LOS ANGELES COUNTY: 7:30 p.m., Webster School Cafeteria, 3602 Winter Canyon Rd., Malibu (water quality)
- Nov. 15 LOS ANGELES COUNTY: Pasadena Lung Association 7:30 - 9:30 p.m., Faculty Dining Room, Pasadena City College, 1570 E. Colorado, Pasadena (air quality)
- Nov. 16 LOS ANGELES COUNTY: 7:30 p.m., Wilson High School Multi-Purpose Room, 16455 Wedgeworth Dr., Hacienda Heights (water quality)
- Nov. 28 ORANGE COUNTY: 7:30 p.m., Police Department Basement, 2000 Main St., Huntington Beach (air quality)
- Nov. 29 ORANGE COUNTY: 2:00 p.m., Board of Supervisors Hearing Room, County Hall of Administration, 10 Civic Center Plaza, Santa Ana (air quality)
- Nov. 29 ORANGE COUNTY: 7:00 p.m., Fullerton Main Library, 353 West Commonwealth Street, Fullerton (air quality)
- Nov. 30 ORANGE COUNTY: 7:00 p.m., Sears Roebuck Consumer Room, Laguna Hills Mall, El Toro Road, El Toro (air quality)
- VENTURA COUNTY: Date and meeting place to be announced. (Development Guide & Amendments to the RTP)

Hearings

Unless otherwise indicated, hearings are scheduled from 9:30 a.m. to 4 p.m. for the Air Quality Management Plan and 4-8 p.m. for the 208 Areawide Waste Treatment Management Plan, SCAG-78 Growth Forecast Policy, and Amendments to the Regional Transportation Plan. All hearings include Environmental Impact Reports.

- Dec. 4 LOS ANGELES COUNTY: Board of Supervisors Hearing Room, 500 W. Temple St., Los Angeles
- Dec. 6 SAN BERNARDINO COUNTY: Chambers of the Board of Supervisors, 175 W. 5th St., 2nd Floor (use rear entrance), San Bernardino
- Dec. 8 LOS ANGELES COUNTY: West Covina City Council Chambers, 1444 Garvey Ave., West Covina
- Dec. 12 IMPERIAL COUNTY: Chamber of Commerce, 1100 Main Street, El Centro (4-8 p.m. only; Development Guide and RTP Amendments)
- Dec. 13 VENTURA COUNTY: Lower Plaza Assembly Room, County Government Center, 800 S. Victoria, Ventura (3-6 p.m. only; Development Guide and RTP Amendments)
- Dec. 14 ORANGE COUNTY: Board Hearing Room, 10 Civic Center Plaza, Santa Ana
- Dec. 15 RIVERSIDE COUNTY: Board of Supervisors Hearing Room, 14th Floor, 4080 Lemon St., Riverside

For further information, call SCAG at (213) 385-1000.



Table E-1
208 PLAN ELEMENT REPORTS AND APPENDICES

LISTING AND TITLE CROSS-REFERENCE

Volume No.	Plan Part	Plan Section	Title	Supporting Appendices (Separately Bound)	References		
					40 CFR 131.11	208 Work Plan	Agency Tasks
1	1	1-1,1.2	<u>Water Quality Planning Framework</u> Background, Objectives & PHEL Projections	1.1-1, 1.2-1	a(1),c	200,300 900, 1053/4 200,500	2.6,2-12
2	1	1.3	Water Quality Standards & Assessments <u>Water Quality Action Plan</u>		a(3),b-g		
3	2	2.1	Nonpoint Source Waste Management Plan	2.1-1 thru 2.1-3	j,l a(2),a(4)	403,506, 507, 1410/20, 1450/60, 401,404, 600	2.7,2-9, 2-11, 2-12
4	2	2.2,2.2A	Municipal and Industrial Waste Treatment Management Plan	2.2-1, 2.2-2	h,i	700,1156 1310/20	2-1A, 2-10, 2-12
5	2	2.2B	Waste Treatment Management for Unsewered Areas in the Malibu/Topanga Area		h	1153	2-1D
6	2	2.3,2.3A	Water Conservation and Reuse	2.3A-1	h	402,404, 405,700, 1154, 1430/40 1150-1152	2-8,2-12
7	2	2.4,2.4A	Residual Waste Management Plan	2.4-1, 2.4A-1	k	405,700 1154, 1430/40	2-8,2-12
8	2	2.5	Integrated Control Plans - Priority Program for Newport Bay <u>Implementation Plan</u>	2.5-1 thru 2.5-6	d,j,l		2-1B
9	3	3.1	Policy and Institutional Framework	3.1-1 thru 3.1-3		200,1251	2-5,2-12
10	3	3.2	Management System, Financial Plan and Implementation Schedule	3.2-1 thru 3.2-3	m,n,o	505,1610, 1711,1712 1713,1714	2-2,2-3

and to go beyond these minimum requirements to ensure the maximum possible public involvement. SCAG's 208 public participation program has consisted of four distinct activities: public information; public involvement; integration and response; and evaluation. Throughout the 2-year planning period, SCAG and participating agencies (who conducted subregional public participation program under SCAG's guidance) have actively engaged in public participation efforts to ensure a high level of citizen input in the development of the 208 Plan.

Section 1.2: Population, Housing, Employment and Land Use

The draft 208 plan is based on the draft SCAG-78 growth forecast policy, an update of the SCAG-76 growth forecast. The growth forecast predicts approximately 3 million additional people, 1.4 million additional housing units, 2.2 million additional jobs, and 300,000 additional urban acres in the six-county SCAG region by the year 2000. The forecast relies on local forecasts to the maximum extent possible, consistent with regional policies.

The South Coast 208 planning area is smaller than the six-county SCAG region. It includes all of Orange County; the metropolitan portions of Los Angeles, Riverside and San Bernardino Counties; and a small portion of Ventura County. Within the South Coast planning area, population is forecasted to increase by 25.5% from 9.6 million in 1976 to about 12 million in the year 2000. Urban acreage is forecasted to increase by 12.8% from about 1 million acres in 1976 to about 1.2 million acres in the year 2000.

Section 1.3: Water Quality Standards and Assessments

Water quality standards for all surface and ground waters have been established by the State. The standards consist of the present and potential beneficial uses of the water and the water quality objectives necessary to protect them. Water quality standards previously developed by the California Regional Water Quality Control Boards, and presented in the Water Quality Control Plans (Basin Plans) adopted in 1975, are now being or have been updated.

Within the South Coast planning area, two water segments have been identified as "water quality limited": Newport Bay and the Santa Ana River, Reaches 2 and 3. For these water bodies, water quality standards are currently not being met, and required 1983 treatment technology for point sources will be insufficient to allow standards to be met.

Part 2: Water Quality Action Plan

The Water Quality Action Plan contains a series of 20 policies and numerous actions for implementation which, if undertaken as proposed, would protect or improve water quality in the South Coast planning area. Attachment A to the plan is a foldout chart which lists each action, and identifies management agencies, costs and schedules. The Water Quality Action Plan is divided into five separate sections: 1) Nonpoint Source Waste Management Plan, 2) Municipal and Industrial Waste Management Plan, 3) Water Conservation and Reuse, 4) Residual Waste Management Plan and 5) Integrated Control Plans - Priority Program for Newport Bay. Findings, policies and actions in each of these sections are outlined below.

SECTION 2.1: NONPOINT SOURCE WASTE MANAGEMENT

General Policy

Local governments shall be encouraged, in accordance with area-wide guidelines, to minimize nonpoint source pollution resulting from land management practices, recognizing that environmentally sensitive areas need protection to prevent water quality problems and to protect beneficial uses, including natural ecosystems.

Spills of Hazardous Substances

Findings

1. Accidental and indiscriminate spills of hazardous materials, especially toxic substances have and may seriously impact receiving water quality, public health and beneficial uses, including natural ecosystems.
2. Counties and cities participate in control of spills of hazardous substances through general and special purpose units of governments.
3. A comprehensive and structured contingency plan for containment and clean-up procedures for spills of hazardous substances would provide increased effectiveness and efficiency in mitigating the impacts of spills.

Policy

See general policy above on nonpoint source waste management.

Actions

1. Implement specific subregional actions to improve containment and clean up procedures for hazardous substance spills as described in Table IV-1 and as recommended by participating agencies.
2. Develop and implement a comprehensive areawide-local contingency plan for spills of hazardous substances.

Construction Activities - Erosion and Sediment Control

Findings

1. Erosion and sediment-related water quality problems occur in many areas of the region.
2. Present local ordinances do not fully provide for adequate control of erosion and sediment-related impacts to receiving waters, especially during periods of heavy rainfall when erosion potential is greatest.
3. Adequate technology and preventive measures exist which can be used in construction activities to protect water quality from erosion and sediment.
4. Resource Conservation Districts (RCDs) have adequate capability to help plan, review and implement erosion and sediment control programs.
5. The California Regional Water Quality Control Boards have sufficient regulatory powers over construction activities to protect water quality.

Policy

In locations where current management practices are inadequate for erosion control, more effective control programs to minimize storm-related impacts on receiving waters, which impacts result from transport of sediment from construction sites, shall be implemented and stricter enforcement of grading ordinances shall be encouraged. Reduction of grading shall be encouraged where consistent with public safety.

Actions

1. Strengthen existing erosion and grading control ordinances by (1) adopting specific ordinances for areas requiring water quality control, which are to be at least as effective as the Model Erosion and Sedimentation Control Measures for Grading Ordinances guidelines in Appendix B of the draft 208 Plan or (2)

adopting the Model Erosion Control Ordinance contained in Appendix C of the draft 208 Plan.

2. Stringently enforce erosion and grading control ordinances in areas identified in the Nonpoint Source Waste Management Plan.
3. Distribute homeowner's guides for new developments, containing information on erosion control and prevention of landsliding.
4. Conduct special educational training programs in erosion and sediment control applications for the construction industry and local governments.

Agricultural Practices

Findings

1. Agricultural practices have the potential to cause serious water quality degradation of both surface and groundwaters in the South Coast 208 planning area.
2. Dairy waste management has resulted in TDS problems in groundwater basins in the Upper Santa Ana River watershed.
3. Farmers are assisted in controlling erosion and soil loss, and water quality impairment, through Resource Conservation Districts (RCDs) and the U.S. Department of Agriculture, Soil Conservation Service (SCS).
4. Water quality would be further protected if all agricultural lands were required to have a Resource Conservation Plan to guide farm operations.

Policy

Best Management Practices for control of water quality of agricultural return flows, based on economic and environmental consideration, shall be implemented where analysis shows that water quality and beneficial uses would be protected.

Actions

1. Develop and adopt an ordinance that requires Resource Conservation Plans for all areas in agricultural use.
2. Expand Resource Conservation Plans to be consistent with 208 Plan Best Management Practices for agriculture.
3. Develop long-range Best Management Practices and implementation strategies for Dairy Wastes in the Chino Valley.

Nonpoint Urban Wastes; Urban and Industrial Stormwater Systems

Findings

1. Urbanization of a natural drainage basin can significantly alter the pattern, quantity and quality of stormwater runoff.
2. Sources of nonpoint urban wastes include particulates falling from the atmosphere, particulates and liquids produced by vehicle operations, vegetative debris, litter, animal wastes, eroded soil, applied chemicals and eroded structural materials.
3. Deposition of stormwater-transported litter and debris on beaches, coastal wetlands and in harbors impairs beneficial uses of waters and results in clean-up costs.
4. Discharge from storm drains to localized areas of poor circulation in some harbors appears to cause observed decreases in benthic (bottom-dwelling) species diversity.
5. High bacterial counts have been observed in coastal waters during and following rainstorms.
6. The sources and amounts of nonpoint urban wastes have not been sufficiently characterized within the South Coast planning area.
7. An easily applied source control measure for minimizing waste-load pickup by urban runoff is street sweeping.
8. Current street sweeping programs can be made more effective in terms of reducing the wasteload to urban runoff and receiving waters.
9. Increased frequency and efficiency of sidewalk and street sweeping for a period before the onset of the rainy season may lessen "first flush" effects.
10. Flushing is an effective street cleaning process, but without collection of wastewater, it results in the transport of wastes to receiving waters.
11. Catchbasin and inlet basin cleaning is a widely-practiced urban runoff control measure.
12. Stormdrain cleaning reduces wasteloads entering receiving waters.
13. Anti-litter ordinances are effective measures for reduction of wasteloads to receiving waters.

14. Limited information currently precludes comprehensive assessment of the acute and chronic impacts of nonpoint wastes on public health and receiving waters in the South Coast.
15. The 1978 State Ocean Plan sets forth discharge requirements for nonpoint sources, including surface runoff.
16. Further monitoring and research should be conducted to determine the impacts of nonpoint urban wastes on public health and receiving waters before significant public investment in control programs can be justified; further detailed studies also need to be conducted to determine the effectiveness of alternative control measures.
17. Hydrographic modifications resulting from new development, and accompanying nonpoint wastes, can adversely affect the ecological balance and water quality of lakes and coastal bays, estuaries, and wetlands.

Policies

Operational procedures in stormwater systems management shall be supported which protect water quality and encourage maximum beneficial use of stormwater to the extent economically feasible.

Measures to reduce runoff volume and peak flows in new developments shall be supported where practicable to maintain a more native riparian habitat and to minimize the need for stream channelization.

Actions

1. Existing street sweeping programs (prior to passage of Proposition 13) should be continued with consideration given to increasing their effectiveness in reducing wasteloads to receiving waters.
2. Maintain current litter control programs.
3. Maintain current catch basin, inlet basin and storm drain cleaning programs with consideration given to increasing the effectiveness of these programs.
4. Emphasize reduction of runoff volume and peak flow rates as mitigation measures in environmental impact reports (EIRs) for new developments.

Saline Water Intrusion

Findings

1. Groundwater is a major source of water supply in the 208 planning area.
2. Pumping in excess of the safe yield of the groundwater basins (i.e., the amount of water that is replaced naturally or artificially) can cause the groundwater table to be lowered below sea level, which then allows salt water to intrude into the groundwater aquifers.
3. The use of injection wells or creation of pumping trough has been successfully used in three barrier projects in the 208 planning area.
4. Proposition 13 impacts may result in the curtailment by presently operating agencies of injection projects in Los Angeles County.

Policy

Current groundwater basin management Practices that are controlling saltwater intrusion in coastal areas shall be maintained, and additional practices, where necessary, shall be encouraged.

Action

1. Maintain existing management programs for control of saline water intrusion.

Miscellaneous Nonpoint Sources

Findings

1. Mining in the South Coast planning area is primarily restricted to sand and gravel mining; mining is not a significant source of water quality problems in the South Coast planning area.
2. Forestry operations in the South Coast planning area are minimal, and are not a significant source of water quality problems in the South Coast planning area.

3. Aerial fallout will be reduced through the Air Quality Management Plan, and does not require additional controls through 208 planning.

Policies

Additional research on aerial fallout impacts on water quality shall be supported.

Management of nonpoint source pollution from vegetative management shall be supported where known water quality problems have occurred.

Preventive management strategies for mining-related nonpoint sources of pollution to protect water quality shall be supported.

Actions

No actions are proposed at this time.

SECTION 2.2: MUNICIPAL AND INDUSTRIAL WASTE MANAGEMENT PLAN

Consistency of Wastewater Facilities with the Draft SCAG-78 Growth Forecast Policy

Findings

1. Wastewater management is provided by a large number of special districts and local governments within the South Coast planning area.
2. The availability of wastewater services is commonly recognized as a primary factor in influencing growth.
3. Growth management and the provision of wastewater services need to be consistent and coordinated.

Policies

1. Municipal* wastewater collection and treatment facilities shall be planned, designed and constructed based on SCAG's adopted growth forecast and water conservation policies. Consistency of wastewater facilities with SCAG's growth forecast shall be ensured through the location and size of the facilities and through the timing of their use. Phased and modular construction of treatment plants shall be encouraged.

2. In locations where municipal* wastewater facilities are approaching capacity, local governments shall, consistent with local and regional growth policies and water quality protection, be encouraged to actively seek funds for capacity increases; to develop contingency plans for wastewater management; and to restrict future development until sufficient capacity, or approved alternative waste treatment systems, are provided.

* Municipal facilities are identical to publicly-owned treatment works as defined by federal regulations and do not include discrete industrial dischargers.

Actions

1. Plan, design and construct the facilities necessary to meet the municipal waste treatment system needs shown in the 1978-79 SWRCB Clean Water Grant Project Priority list, consistent with the wastewater flow forecasts shown in the Municipal and Industrial Waste Management Plan.
2. Prepare the 1979-1980 Clean Water Grant Project Priority List to provide for funding of the municipal facilities in the South Coast planning area on a schedule consistent with the wastewater flow forecasts and the dates shown in the Municipal and Industrial Waste Treatment Management Plan.
3. Revise NPDES permits to insure that permitted wastewater flows are consistent with the flows shown in the Municipal and Industrial Waste Management Plan for the time period of the permit.

Wastewater Facilities Planning and Air Quality Management Coordination

Findings

1. The Clean Air Act requires the construction grants program to be consistent with Air Quality Plans.
2. Realization of the SCAG-78 growth forecast will result in increased air pollutant emissions; the Air Quality Management Plan contains tactics and strategies designed to attain and maintain ambient air quality standards.

3. It is the direct function of wastewater management agencies to adequately plan for the accommodation of forecasted growth within their service areas.
4. In the Air Quality Management Plan, little direct responsibility will be assigned to wastewater management agencies for implementation of air quality control measures.
5. Adoption and implementation of the 208 Plan, AQMP and SCAG-78 growth forecast policy will assure consistency of water quality programs with growth management and air quality management.
6. Existing federal and state funding policies which require and fund air quality evaluation, and evaluation and development of air quality control measures, in the wastewater facilities planning and EIR/EIS process have been indirect and ineffective.

Policy

Municipal* wastewater facilities planning shall be consistent with the adopted Air Quality Management Plan, based on the adopted Growth Forecast Policy and measures for attaining and maintaining ambient air quality standards.

Actions

1. Plan, design and construct wastewater facilities consistent with the Air Quality Management Plan (AQMP).
2. In the preparation of Environmental Impact Reports and Statements (EIRs/EISs) for municipal wastewater facilities, specify as mitigation measures for air quality impacts those tactics and strategies adopted as part of the Air Quality Management Plan.
3. Assistance in the implementation of the Air Quality Management Plan.

Industrial Pretreatment

Findings

1. Industrial discharge to municipal sewers can cause environmental problems.
2. Stringent local industrial pretreatment programs are required by new EPA regulations.

Policy

The flexibility of management agencies to choose among various pretreatment programs, which result in compliance with discharge requirements, shall be encouraged.

Actions

No actions are proposed at this time.

Ocean Discharge

Findings.

1. The Clean Water Act, as amended in 1977, provides for a waiver of federal secondary treatment requirements for deep ocean discharges, if certain conditions are met.

Policy

Treatment levels for deep ocean discharges shall be supported which protect, enhance and restore marine water quality and which assure balanced, indigenous, populations of marine life. Wastewater reclamation and reuse shall be encouraged as an alternative to wastewater discharge to the marine environment.

Actions

No actions are proposed at this time.

Industrial Waste Treatment

Findings

1. The Clean Water Act, as amended in 1977, specifies revised effluent limitations for direct industrial waste discharges.
2. Regional Water Quality Control Boards will revise "their" NPDES permits for industrial waste discharges to be consistent with the effluent limitations.

Policies and Actions

None proposed at this time.

Unsewered Areas

Findings

1. The cost of conventional wastewater collection and treatment facilities is prohibitive for a number of unsewered communities.
2. The Malibu/Topanga area (in Los Angeles County) is an unsewered area requiring improved waste treatment management.

Policy

In rural areas, alternatives to centralized wastewater treatment systems shall be encouraged, consistent with protection of groundwater quality and public health.

Actions (for the Malibu/Topanga Area)

1. Plan, design and construct package treatment plants for beach-front Malibu and part of the Malibu civic center area.
2. Create On-site Wastewater Management Zones in the Malibu/Topanga Area pursuant to the Behr Bill (SB 430).
3. Develop and implement septic tank management approaches for each On-site Waste Management Zone.
4. Revise the Fiscal Year 1978-79 Clean Water Grant Project Priority listing for Malibu area wastewater facilities.

SECTION 2.3: WATER CONSERVATION AND REUSE

Findings

1. Existing stormwater conservation programs save water.
2. Consumer water conservation is desirable to avoid waste and to provide efficient use of water resources.
3. The need for supplemental water supply, the availability of high quality advanced treated effluent currently flowing to the ocean, and the increasing cost of freshwater development and delivery have motivated planning to expand water reuse in the Los Angeles and Orange County metropolitan areas.

4. A plan for increasing water reuse is being prepared by the Orange and Los Angeles Counties Water Reuse Study.
5. The reuse study's goals and objectives are consistent with the 208 areawide conservation and reclamation policies.

Policies

Appropriate changes in institutional, legal and financial arrangements shall be encouraged to increase the potential for wastewater reuse, taking into account public health, environmental and socio-economic constraints, and the cost of imported waters.

Appropriate existing or revised monitoring, and regulatory requirements, shall be supported to increase the potential for wastewater reuse when consistent with public health, social, economic and environmental constraints. Increased research on environmental and health constraints shall be encouraged.

Wastewater and water supply systems development shall encourage water conservation and reuse as a method of augmenting the limited fresh water supply, taking into account public health, environmental socio-economic and water rights constraints.

Actions

1. Maintain current stormwater conservation programs.
2. Develop a long-range plan and implementation strategy to increase wastewater reuse in Los Angeles and Orange Counties through the Orange and Los Angeles County Water Reuse Study.
3. Adopt the 208 Plan water conservation and reuse policies as the policy framework for the Los Angeles/Orange County Reuse Study.

SECTION 2.4 RESIDUAL WASTE MANAGEMENT PLAN

Wastewater Sludges Management

Findings

1. The Federal Water Pollution Control Act, as amended, specifies a national goal that all discharges of pollutants into navigable waters be eliminated by 1985; the State Ocean Plan prohibits the discharge of sludge to ocean waters.
2. Approximately 1,100 tons of wastewater sludges are produced daily in the South Coast planning area.

- 3 Wastewater sludges are presently disposed of by composting, agricultural land spreading, landfill disposal and ocean disposal.
4. A long-range sludge management plan and implementation strategy is being developed by the Regional Wastewater Solids Management Program for the Los Angeles/Orange County Metropolitan Area (LA/OMA).

Policy

The regional sludge management strategy that shall be supported is that which has the least environmental, social, economic and resource costs, considered jointly; measures to increase energy recovery or other beneficial uses of sludge shall be encouraged.

Actions

1. Develop a long-range wastewater sludge management plan and implementation strategy for the Los Angeles/Orange County Metropolitan Area through the LA/OMA Project.

Other Solid and Non-Sewerable Liquid Wastes

Findings

1. Residual wastes generated in the South Coast Area are principally disposed of through a system of sanitary landfills.
2. State Law (SB-5) requires the preparation of County Solid Waste Management Plans for disposal of all residual wastes.
3. Residual waste management practices undertaken in the South Coast area have been generally protective of water quality.
4. Water quality impairment may occur if water quality protection is not emphasized in local day-to-day residual waste management activities.

Policy

Residual waste management programs -- including disposal, resource/energy recovery, waste-reduction, and recycling shall be consistent with water quality goals.

Action

1. Develop and implement a strategy for permanently closing the Stringfellow Class I hazardous waste disposal site.

2. Suspend the granting of waste disposal permit exemptions by local solid waste enforcement agencies for Class III landfills.
3. Require groundwater quality monitoring and other monitoring program improvements at Class III sanitary landfills.

SECTION 2.5: INTEGRATED CONTROL PLANS: PRIORITY PROGRAM FOR NEWPORT BAY

Habitat Restoration

Background

The California Department of Fish and Game instituted a program in 1976 called the "Newport Bay Pilot Marsh Restoration Project" to develop and implement a program to enhance the wildlife habitat in the Upper Newport Bay Ecological Reserve.

In 1975 Upper Newport Bay became an Ecological Reserve (UNBER) under the control of Fish and Game as a result of legislative action. The objective of the Department is to restore the wetlands to a condition similar to that prior to the 1969 floods and the salt production operations, as well as to provide a desirable habitat for several endangered and threatened species, including: (1) the California least-tern, (2) the lightfooted clapper rail, and (3) Belding's savannah sparrow.

In order to enhance the wildlife habitat in the upper bay, not only must pollution be reduced, but also sensitive dredging and rechannelization in some areas is needed to permit mixing of salt and fresh waters and hence preserve the estuarine habitat.

Policies

The wildlife habitat in the Upper Newport Bay Ecological Reserve shall be enhanced and maintained in such a manner as to optimize its function as a coastal wetland resource. The sediments not contained by upstream controls and facilities shall be managed in such a manner as to result in the least environmental damage practicable

Actions

- 1) Implement the pilot marsh restoration project (PMRP)
- 2) On completion of the PMRP: a) establish a Protected Experimental Habitat (PEH), b) improve the lower portion of the upper bay to increase circulation and decrease stagnation, and c) improve salt pan and tidal areas.

- 3) Assess efficiency of upstream sediment controls and develop program for management of sediment reaching the Bay.

Sediment and Erosion Controls

Background

Inadequate regulation and control of erosion on public and private construction projects and agricultural lands has contributed to accelerated erosion and consequent deposition of sediments in Upper Newport Bay, seriously endangering the estuarine habitat of the bay. Furthermore, erosion control provisions of the Uniform Building Code are permissive, resulting in inconsistent maintenance of control measures and leading to excessive deposits of sediment in Upper Newport Bay.

In addition to improved regulations and enforcement to control erosion and sediment, structural measures are needed. These structural measures include additional channel stabilization (which may include vegetation), maintenance programs and construction of debris and desilting facilities, consistent with flood control needs.

Policy

Upper Newport Bay shall be protected from the influx of sediment to the maximum extent reasonably practicable by:

1. Effective and enforceable administrative and legal actions emphasizing source controls;
2. Effective and environmentally acceptable land management practices; and
3. The construction and maintenance of effective environmentally acceptable facilities above Jamboree Boulevard.

Such actions shall be accomplished by the appropriate jurisdictions within the watershed within funding capabilities. State and Federal funding sources shall be sought where they may effect acceleration of implementation of corrective and preventive control measures. The Department of Fish and Game shall, as a part of the continuing action program, assess the efficiency of these upstream sediment controls and shall develop a program for management of sediment reaching the bay consistent with their findings.

Actions

1. Develop, adopt and enforce grading ordinances at least as stringent as the SCAG model grading ordinance as amended by NIWA.

2. Develop and promote adoption of best management practices (BMPs) for reduction of erosion from agricultural lands.
3. Provide dams for sediment and flow retention.
4. Develop an interim program for stabilization of flood control channels.
5. Develop and implement a sediment maintenance plan for San Diego Creek.

Surface Sanitation

Background

Inconsistencies exist in the San Diego Creek Watershed among public and private street cleaning practices, including type of equipment, frequency and debris disposal methods. Catch basins and storm drains are generally cleaned and maintained for maximum drainage capacity. Quality of storm runoff ultimately destined to discharge into Upper Newport Bay should also be a consideration.

Policy

Upper Newport Bay and its tributaries shall be protected to the maximum extent practicable from surface pollutants and debris through effective and enforceable actions by all jurisdictions within the watershed.

Actions

1. Develop and implement an optimum mix of street-sweeping equipment.
2. Modify street-sweeping practices for optimum efficiency.
3. Modify local curbs and gutter to facilitate removal of significant street pollutants.
4. Increase enforcement of illegal dumping regulations.

Vessel Waste Management

Background

There are approximately 9,000 boats moored or berthed in Newport Harbor. Vessel-related pollutants include human waste, refuse and garbage, bilge water, petroleum products, trace metals and organics, and cleanup and repair runoff.

Policy

Appropriate agencies shall enforce existing laws to control vessel-related pollution, and the voluntary modification of behavior of the public whose actions directly affect Newport Bay water quality shall be gained through the use of educational programs.

Actions

1. Enforce existing laws requiring marinas to have accessible sewage pump-out capabilities.
2. Develop and implement regulations relating to in-the-water hull cleaning practices.
3. Increase Emergency Clean-up Fund for Lower Newport Bay.
4. Develop and implement public education programs designed to reduce vessel waste pollution.
5. Cooperatively develop vessel waste enforcement programs and define duties and authorities for various local/state/federal agencies.

Integrated Water Quality Evaluation Program

Background

To adequately monitor water quality conditions of Newport Bay and its tributaries, a long-range evaluation program is essential to determine the significance and environmental effects of suspected pollutants. These include physical (floating debris and suspended particles), chemical (nutrients, pesticides, high trace metal concentrations) and bacteriological (high coliform counts) contaminants.

Policy

A comprehensive monitoring and modeling program shall be developed for Newport Bay and its watershed, integrating continuing monitoring programs conducted by existing agencies.

Actions

The comprehensive program would be implemented as part of the Continuing Planning Program.

Part III: Implementation Plan

This section of the draft 208 Plan contains a description of the policy and institutional framework for 208 planning and a management system, financial plan, and implementation schedule for actions proposed in the 208 Plan.

SECTION 3.1: POLICY AND INSTITUTIONAL FRAMEWORK

This section of the draft 208 Plan describes and evaluates the existing environmental and water quality management framework in the South Coast planning area. To assure successful implementation of the 208 Plan, coordination and consistency among related federal, state and local programs must be achieved. The evaluation contained in this section provides the basis for developing the management system presented in Section 3.2.

SECTION 3.2: MANAGEMENT SYSTEM, FINANCIAL PLAN AND IMPLEMENTATION SCHEDULE

This section of the draft 208 Plan identifies management agencies and institutional arrangements through which the 208 Plan will be implemented. There are two basic types of programs to be carried out as part of the management system: water quality action programs and continuing planning programs.

Policies

Nine areawide policies have been developed which have provided direction to development of a system for implementing the 208 Plan:

Overall Management System

Implementation of the 208 Plan shall rely primarily on local governments and special districts designated as management agencies. Coordination and consolidation of management agency functions shall be encouraged to avoid fragmentation or duplication of services. Coordination of 208 Plan implementation and the continuing planning process shall be shared by the Regional Water Quality Control Boards and the designated areawide planning agency (working with participating local agencies) consistent with state guidelines.

Water Quality Management Framework

Water quality control measures recommended in 208 planning shall use the most cost effective approach to protect, and where possible enhance, water quality; prevent water quality problems from occurring; provide for compliance with state and federal

law; and take into consideration related social, economic, and environmental factors.

Point source and nonpoint source control planning shall be coordinated through the 208 planning process, with the recognition that control needs may differ within different watersheds, and would rely on local agencies for data, analysis, and implementation to the maximum extent possible.

Regulatory Program

Local implementation of nonpoint source controls shall rely primarily on local regulation, consistent with 208 planning and with state and federal regulations.

Strict enforcement of discharge requirements shall be supported. If research shows that detrimental impacts are not present, then change of discharge requirements shall be encouraged.

Coordination of Research, Monitoring, and Planning

Coordination of water quality research, monitoring, and planning activities shall be encouraged.

Financing

Nonpoint source control programs shall be financed through federal, state, or local funding sources, depending upon the availability of funds from each source. State and federal funds for nonpoint source control programs shall be sought to the maximum extent. Local funding alternatives shall be included for all nonpoint source controls in the 208 Plan as a contingency.

The 'user pays' principle shall be encouraged for financing municipal wastewater management systems, consistent with state and federal requirements. Flexibility of wastewater management agencies to choose among various local financing mechanisms shall be encouraged.

State and federal methods for allocating funds, consistent with 208 and AQMP Plans, shall be supported so that grants for municipal wastewater treatment are allocated to the region based on identified needs.

Management System

A two-tiered management structure is proposed for implementing the 208 Plan -- local and areawide. The local tier is comprised of existing local agencies that will have responsibilities for implementing specific actions in the Water Quality Action Plan. At the areawide level, responsibility for continuing planning will be a

single coordinated effort by the Regional Water Quality Control Boards (Los Angeles, Santa Ana, and San Diego regions) and SCAG, acting as a coordinating agency for various units of local government. Overall coordination of the 208 Plan implementation will also be provided by SCAG.

A listing of all actions proposed in the Water Quality Action contained in Attachment A, along with the management agencies recommended for each action. Actions in the draft 208 Plan can be classified as regulatory actions, waste treatment management actions, planning actions, operations and maintenance actions, or educational actions.

Regarding continuing planning, both federal and state guidelines call for the creation of a continuing planning program and process after the initial 208 planning effort to:

1. Coordinate and monitor plan implementation; and
2. Update and revise the initial 208 Plan (and Basin plans), including both additional planning for priority problems and new studies for water quality problems not yet fully studied.

The State Water Resources Control Board Planning Program Guidance Memorandum #11 (dated March 28, 1978), requires that "Coordination of 208 Plan implementation and the continuing planning process shall be shared by the Regional Water Quality Control Boards and the designated areawide planning agency." In accordance with this memorandum, the Regional Water Quality Control Boards (Los Angeles, Santa Ana and San Diego Regions) and SCAG (working with local participating agencies) are recommended in the 208 Plan as lead agencies for continuing planning in the South Coast area. Specific coordination mechanisms are discussed in detail and several alternatives are proposed for creating a single policy advisory structure between SCAG and the Regional Boards as required by the memorandum.

Summary

In general, the draft 208 Areawide Waste Treatment Management Plan is itself a set of mitigation measures designed to lessen the severity of water quality impacts resulting from the development of the South Coast Planning Area, impacts that might otherwise continue to increase as future development occurs. Many of the effects that might result from implementation of the plan are, therefore, beneficial in nature.

The adverse impacts can be viewed as the costs (biophysical, social, and economic) of achieving these desired improvements. As the population of the basin grows, it will be necessary for increasing numbers of people to share its resources, including its inland and marine waters. The costs of managing the distribution and recycling of these resources will increase. The discussion of impacts contained in this document is an attempt to better relate the costs to the benefits of the actions proposed in the draft 208 Plan.

A set of policy statements is presented in the draft 208 Plan. These will form the framework for the more specific actions analyzed in this document. These policies were developed from an initial set of water quality issues arising from an extensive public workshop and committee review process that refined the initial issues into a comprehensive set of guiding policies for development and implementation of the Plan.

Many of the actions contained in the draft 208 Plan concern the continuation of activities that, to some degree, are already being implemented in parts of or throughout the South Coast Planning Area. The degree to which each of the impacts of these actions would occur would, therefore, vary throughout the area, depending on the difference between existing and recommended practices in each locality. The degree to which recommended voluntary actions would be undertaken is also difficult to estimate accurately, and could vary considerably throughout the Planning Area. Finally, most of the actions involve further planning by local jurisdictions before implementation. For these reasons, it is not possible in most cases to be specific about the degree to which the impacts described could occur.

Some of the recommended actions are specific with regard to their location, such as those that pertain to the Priority Program for Newport Bay, the Stringfellow Landfill, and wastewater management in the Malibu area. Others would apply in several locations or throughout the Planning Area.

Those impacts derived from actions dealing with development and construction could occur throughout the entire South Coast Planning Area, but might be most significant in southeastern Orange County, the eastern San Gabriel Valley, western San Bernardino County, and western Riverside

County, since the most intensive development will probably occur in these places (see Draft SCAG-78 Growth Forecast Policy EIR). Impacts related to agriculture will decrease as agricultural lands are developed, but will be significant in parts of all five counties in the Planning Area. Ocean impacts will result primarily from those actions implemented in Orange and Los Angeles Counties. Spills of hazardous wastes might be expected on major transportation routes anywhere in the Planning Area, but will most likely occur in the heavily industrialized areas of Orange and Los Angeles Counties.

Wastewater treatment facilities necessary to accommodate anticipated future growth are described for a number of locations in the basin, in accordance with the State Water Resources Control Board's 1978/79 Clean Water Grant Project Priority List. About \$894 million will be spent to develop these facilities in Los Angeles County; \$302 million in Orange County; \$95 million in Riverside County; and \$138 million in San Bernardino County. Coordination with Air Quality Management Plan requirements will be an important element of the development of each of these facilities.

A regional sludge management plan is being developed by the LA/OMA project for the Los Angeles and Orange County Metropolitan Area, and will primarily affect these two counties. Effects of tightening Class III landfill regulations would be felt throughout the Planning Area.

The five elements of the draft 208 Plan include:

1. Nonpoint Source Waste Management Plan
2. Municipal and Industrial Waste Management Plan
3. Water Conservation and Reuse
4. Residual Waste Management Plan
5. Integrated Control Plans — Priority Program for Newport Bay.

Nonpoint Source Waste Management Plan

The Nonpoint Source Waste Management Plan deals entirely with the development and implementation of management plans, and involves no construction. In terms of impacts, the most significant actions are concerned with hazardous waste spills, reduction of runoff volume and peak flow rates from developed areas, construction erosion, and agriculture.

All of the actions within this element have some potential for effecting water quality improvements through reducing the possibility of polluting substances being carried into receiving waters. Ground, surface, and marine waters could benefit. Improvements in the quality of these waters could in turn result in a reduction of adverse impacts on the biotic communities dependent upon them. Decreased runoff from developed areas could increase ground water recharge and reduce the degradation of riparian habitats. Retention of this water could also, however, increase somewhat the possibility of landslides or slippages.

Improved construction and agricultural practices could reduce erosion and conserve soil productivity. Downstream siltation could be reduced, as could landslide and slippage hazards in hillside areas. Some techniques used to reduce runoff and erosion on construction sites could have significant visual impacts, however.

Conservation of water and energy could result from implementation of improved Resource Conservation Plans on agricultural land. Long-term degradation of agricultural soils might occur, however, if recommended irrigation practices are not carefully managed.

Generally, implementation of this element of the draft 208 Plan would result in little or no irreversible commitment of resources except for the financial costs involved, and there would also be no growth-inducing impacts. Potential soil contamination and changes in the area's visual character could affect future beneficial uses of the environment.

The Municipal and Industrial Waste Management Plan

The Municipal and Industrial Waste Management Plan deals with construction of wastewater treatment facilities to meet the needs of anticipated population growth and could result in more short-term construction impacts than other elements of the draft 208 Plan. Other actions in this element with potential impacts include preparation of a Clean Water Grant Priority List, revision of National Pollutant Discharge Elimination System permits to ensure that flows do not exceed planned limits, coordination of 208 facility planning and Air Quality Management planning, and management of sewage wastes in the Malibu area.

The primary benefits to be realized from implementation of this element relate to decreased health and safety hazards. The expansion and improvement of waste treatment facilities would reduce the risk of contamination of water supplies from overloaded systems or from malfunctions. Detailed EIRs will be prepared for each of these facilities prior to determining their locations and sizes.

Effluent discharges from new plants could adversely affect water quality and any biotic communities dependent upon affected waters. These discharges will all receive secondary or advanced treatment, however, which would reduce these effects. Existing plants would be upgraded to secondary treatment, reducing their impact on receiving waters. Increased secondary treatment could increase reuse of wastewater, but could also result in the production of greater amounts of sludge and in a reduction of nutrients to some aquatic and marine organisms.

Increased flows of wastewater effluent would increase ground water recharge along the Santa Ana River, but if these flows became sufficient to cause continuous flow in Reach 4 of the river, tertiary treatment could be required for some areas of San Bernardino County to prevent degradation of water supplies.

Numerous short-term effects would result from construction of the treatment plants, such as air quality degradation, odors, dust, noise, traffic congestion, and consumption of energy. Long-term effects of operation of the plants would include air pollution and possible use of energy, depending on the potential of various facilities for recovering energy from treatment processes. Natural biotic communities could be displaced when new plants are built, and significant visual impacts might result that could affect land use around the plants.

Preparation of a Clean Water Grant Priority List and revision of NPDES permits could effect improvements in wastewater management and planning, and could ensure that funds were most effectively used and equitably distributed. The changes that would be made in the NPDES permits could, however, restrict growth in areas where it would otherwise have exceeded predicted levels.

Coordination with Air Quality Management planning could ensure that air quality impacts resulting from the draft 208 Plan were kept to a minimum.

The construction of package treatment plants in the Malibu area would have impacts similar in nature to those discussed earlier related to larger waste treatment facilities. In addition, a health hazard could be created by the possibility of rupture of the sewage lines, which would be pressurized.

The creation of onsite Wastewater Management Zones and the development of septic tank management approaches for the Malibu/Topanga area could reduce health hazards that might result from

the contamination of ground water by sewage, and could reduce odors associated with septic tank use. Increased quantities of sludge could be created, increased maintenance could be required, and increased noise from pumping could occur. Employment opportunities might be created at sewage treatment plants and at companies involved with maintenance of septic tanks.

The most significant adverse effects on future beneficial uses of the environment from this element could involve destruction of natural habitats where treatment plants were sited, visual impacts, effects on land uses adjacent to the plants, and air emissions. The exact magnitude of these impacts cannot be determined, however, until individual project EIRs are prepared. The only resources irreversibly committed would be funds and energy.

Construction of the municipal treatment facilities could be considered growth-inducing to the extent that they facilitate growth to the levels forecast by SCAG-78 for the year 2000.

The Water Conservation and Reuse

The Water Conservation and Reuse element of the draft 208 Plan contains actions dealing with stormwater conservation, consumer conservation, and wastewater reclamation. These actions either call for the continuation of existing procedures, or for further planning activities. They would have no direct impacts.

Residual Waste Management Plan

The Residual Waste Management element of the Plan deals with sludge and with other solid and nonsewerable liquid wastes. Actions refer to the LA/OMA project, to the closing of the Stringfellow Class I disposal site in Riverside County, and to the tightening of monitoring programs in effect at Class III sanitary landfills. The LA/OMA project is still in the conceptual planning stage, and no direct impacts will occur until implementation.

Closing the Stringfellow site and tightening Class III landfill monitoring programs could each reduce the potential for contamination of ground and surface waters, for adverse impacts on the biotic communities dependent on these waters, and for increased public health hazards. Closing the Stringfellow site might result in financial liability for future contamination on the part of the agency assuming responsibility for the closure.

Future beneficial uses of the environment would not be affected by these actions. Also, there would not be a significant irreversible commitment of resources except for the financial costs involved and the use of some Class I landfill capacity for disposing of contaminated soils from the Stringfellow disposal site. No growth-inducing impacts would occur from these actions.

Integrated Control Plans — Priority Program for Newport Bay.

The Priority Program for Newport Bay is a plan for achieving water quality improvements in the San Diego Creek Watershed and in Newport Bay. This undertaking will eventually lead to restoration of an ecologically viable marshland community in the upper portion of the Bay. Specific parts of the plan deal with sediment and erosion controls, habitat restoration, surface sanitation, vessel waste management, and water quality evaluation.

Actions intended to improve control of erosion and sedimentation include the adoption of more effective grading regulations, increased use of Best Management Practices on agricultural lands, the construction of foothill dams for sediment retention and flood control, the stabilization of flood

control channels, and the removal of sediments from portions of San Diego Creek between Jamboree Road and the San Diego Freeway. All these actions could help to reduce the supply of sediments deposited in Newport Bay, which could have a significantly beneficial effect on the ecological viability of the Bay as a marshland community. The foothill dams could also help to reduce flood hazards.

Some biotic organisms, however, could be adversely affected by reductions in sedimentation, due to loss of substrate and nutrients. There could also be a reduction of riparian habitat because of construction of the dams and channelization of streams. Changes in the visual character of the foothill area due to the dams and channelization could be significant, since these structures could be visible from a large area. A new flood hazard could result from potential failure of a foothill dam. Since various elements of the sediment and erosion control plan would remove different amounts of sediment at different costs, continuing studies would be done to assess the potential effectiveness and the desirability of proposed actions.

The habitat restoration program is an ambitious attempt to restore parts of the heavily impacted Upper Bay to an ecologically viable marshland community. Significant changes to the Bay's biotic systems could result. These should be mostly beneficial, though some organisms could be adversely affected. The specific nature of the impacts of this program will not become apparent until it is well under way, and continuing studies are planned to assess these impacts and incorporate the findings into the program. The discussion included in this report of the impacts of the habitat restoration program is intended only as an overview, since a detailed EIR of the plan is currently in preparation.

Actions included to improve surface sanitation conditions would result in a more optimum mixture of mechanical and vacuum sweeping machines, would modify street sweeping practices to achieve greater water quality benefits, and would add curbs and gutters in some areas to increase sweeping effectiveness. All of these actions could reduce the potential for contamination of surface waters, and could improve the general sanitary condition and the appearance of streets. Increased noise could result from use of vacuum sweepers. Illegal dumping would be more closely regulated under a final action in this section, which could decrease public health hazards from ground water contamination and reduce visual degradation from illegal dumping.

This plan contains various measures to reduce water contamination resulting from the operation of vessels. These include stricter enforcement of marina laws regarding availability of sewage pump-out facilities, and better vessel cleaning procedures. Other actions involve increased funding for emergency cleanup in the Bay and the development of public education programs for vessel operators. Besides improvements in water quality that could result from these actions, effects on biotic life in the Bay could be lessened, public health hazards reduced, and the appearance of the Bay improved.

The Integrated Water Quality Control Plan consists of actions for instituting a long-term comprehensive monitoring program to provide more complete information for planning and management of the Bay. No direct impacts would result from this program.

The economic costs of implementing the recommended actions are among the most significant of the draft 208 Plan's adverse impacts. These costs are often difficult to determine accurately because of the programmatic nature of the plan. A range of costs is possible for many actions, and the required funding will not be apparent until further planning is accomplished. For these reasons, it is not possible to accurately estimate the total economic cost of the Plan.

In general, one of the results of many of the actions contained in the draft 208 Plan would be to more equitably distribute the cost of some kinds of mitigation so that more of these costs would be borne by the people benefited than by the general public. In such cases, increased development costs would be ultimately passed on to the user of a site rather than to public agencies (the general public) that might ultimately have been responsible for cleanup, protection, or restoration had the improvements not been made.

Many of the actions proposed would result in requirements for increased levels, management, administration, maintenance, inspection, or regulation. Besides the increased economic costs required for each of these activities, certain social impacts could occur as well. Increased employment opportunities could result, but an adverse reaction on the part of some members of the public to increased levels of governmental activity and regulatory complexity could also occur.

Three types of alternatives to the proposed draft 208 Plan were considered: a no-project alternative, alternative management policies, and alternative actions. The no-project alternative is not considered feasible, since preparation of the 208 Plan is required by federal law. Policy alternatives were subjected to a lengthy areawide review before being refined to the existing policy statements. This analysis is described in documents listed in Section III. A range of implementation levels was considered for each of the proposed actions. These varied from reductions in current program levels for the purpose of reducing expenditures to increased levels of activity for the purpose of achieving greater water quality improvements. In selecting a proposed action from the range of alternatives available in each case, emphasis was placed on demonstrated water quality needs, estimated cost-effectiveness, and the potential for implementation in a timely fashion.

While growth-inducing impacts are discussed here, secondary impacts resulting from growth are not. These are analyzed in the draft SCAG-78 Growth Forecast Policy EIR.

The matrices that follow provide a more detailed summary of the actions proposed in the draft 208 Plan.

RESIDUAL WASTE MANAGEMENT PLAN SUMMARY ENVIRONMENTAL EVALUATION

TABLE
RESIDUAL WASTE MANAGEMENT PLAN
SUMMARY ENVIRONMENTAL EVALUATION

RESIDUAL WASTE MANAGEMENT PLAN SUMMARY ENVIRONMENTAL EVALUATION				Unavoidable Adverse Impacts	Short-Term Use/Long-Term Productivity	Irreversible Commitment of Resources/Environmental Changes	Growth Inducing Impacts
Recommended Actions	Beneficial Impacts	Adverse Impacts	Mitigation Measures				
SLUDGE MANAGEMENT							
Action 28: Develop a long-range wastewater sludge management plan and implementation strategy for the Los Angeles/Orange County Metropolitan Area (LA/OMA Project).	No direct impacts anticipated without provisions for implementation						
OTHER SOLID AND NON-SEWERABLE LIQUID WASTES							
Action 30: Suspend the granting of waste-disposal exemptions by local solid waste enforcement agencies for Class III landfills.	Significant reduction or elimination of ground water and surface water contamination in the Glen Avon region	Relocation of wastes in another Class I landfill required	Select closure option that has the least amount of wastes requiring relocation.	X	X	X	No Growth Inducing Impacts Anticipated
	Improved environment for aquatic biota	Estimated public costs ranging between \$190,000 and \$3,835,000, depending on closure method selected		X	X	X	
	Elimination of air emissions associated with spray evaporation.	Assuming no state financing, potential assumption of liability for contamination problems by municipal agencies if project locally funded.					
Action 30: Suspend the granting of waste disposal permit exemptions by local solid waste enforcement agencies.	Reduce potential for contamination of ground water supplies proximate to Class III landfills	Increased potential for illegal dumping of hazardous wastes with stricter regulations	Increase penalties for illegal dumping Public information program	X	X		
Action 31: Require ground water quality monitoring and other monitoring program improvements at Class III sanitary landfills.	Reduced potential of health hazards to the general public and sanitary landfill personnel.	Increased administration, inspection, and dumping costs.	Increase fines for illegal dumping.	X	X		

Growth Inducing Impacts				Irreversible Commitment of Resources/Environmental Changes	Short-Term Use/Long-Term Productivity	Unavoidable Adverse Impacts		
Recommended Action	Beneficial Impacts	Adverse Impacts	Mitigation Measures					
SPILLS OF HAZARDOUS SUBSTANCES	Facilitates efficient response and effective confinement, decreasing hazards to water and air quality, biological communities, public health, and recreational activities	Slight increase in demand for Class I landfill capacity	Reduction in spills	X			↑	
Action 1: Develop and implement a comprehensive area-wide local contingency plan.		Private capital investment required	Accrued savings resulting from decrease in accident rates	X	X	X		
Action 2: Implement specific subregional actions to improve containment and clean-up procedures for hazardous substance spills as described in Table IV-1 and as recommended by participating agencies.	Potential improvement in visual quality of marine environment	Development and implementation costs requiring public investment approximately \$250,000.	Centralized equipment and trained personnel pool	X	X	X		
	Reduced potential for caustic damage to paved surfaces		More stringent spill fines					
	Identification of future corrective actions		Federal funding to distribute costs over a larger population.					
	Reduced potential for litigation resulting in lower liability insurance costs and associated economic externalities							
	Increased employment opportunities.							
URBAN NONPOINT SOURCE WASTES								
Action 3: Existing street sweeping programs (prior to passage of Proposition 13) should be continued with consideration given to increasing their effectiveness in reducing wasteloads to receiving waters.	← No direct impacts anticipated →							
Action 4: Maintain current litter control programs.	← No direct impacts anticipated →							
URBAN AND INDUSTRIAL STORMWATER SYSTEM NEEDS								
Action 5: Maintain current catch basin, inlet basin and storm drain cleaning programs with consideration given to increasing the effectiveness of these programs.	← No direct impacts anticipated →							
Action 6: Emphasize reduction of runoff volume and peak flow rates as mitigation measures in environmental impact reports (EIRs) for new developments.	Increased potential for ground water recharge	Potential decrease in sediments/nutrients for aquatic and marine biota	Analysis to determine optimum levels of sedimentation	X			No Growth Inducing Impacts Anticipated	
	Potential increases in water for native vegetation, particularly riparian, and reduced irrigation requirements for ornamentals	Increased ground water recharge resulting in an increased potential for accidental ground water contamination	Analysis to determine soil depth to ground water supplies	X				
	Potential improvement in visual character of natural areas	Potential increase in slope failure, waterlogging, ponding, seepage, and/or salt loading in water supplies	Analysis to determine management practices appropriate for given areas	X				
	Slight potential reduction in flood hazards, sedimentation, and erosion	Increased use of natural resources, including energy	Consider conservation of resources during design and construction	X		X		
	Slight improvement in water quality and biotic communities	Potential for increased public resentment of government regulations	Develop public information program	X				
	Reduction in construction costs for flood control facilities.	Impairment of visual quality through use of recommended materials and techniques	Professionally prepared instruction manuals showing how materials and techniques should be used	X	X			
		Potential construction delays	Streamline permit process, simplify procedures, and encourage agency coordination	X				
		Associated costs requiring private investment transferred to the buyer or tenant.	In-depth cost/benefit studies to determine effectiveness of the action.	X	X	X		
	CONSTRUCTION ACTIVITIES							
	Action 7: Strengthen existing erosion and grading control ordinances by (1) adopting specific ordinances for areas requiring water quality control, which are to be at least as effective as the Model Erosion and Sedimentation Control Measures for Grading Ordinances guidelines in Appendix B of the draft 208 Plan or (2) adopting the Model Erosion Control Ordinance contained in Appendix C of the draft 208 Plan.	Reduced erosion/sedimentation resulting in improved water quality and aquatic/marine environments	Decrease in supply of sediments transported to the ocean resulting in beach deterioration	Artificial augmentation of beaches	X	X		
Long-term reduction in landslides/slippages and associated public safety risks		Potential increase in stream channel erosion with clearer water flows	Case-by-case analysis of total effect of reduced volumes and clearer water flows	X				
Improved soil productivity resulting in greater amounts of natural vegetation and wildlife remaining after construction and/or reduced need for fertilizers and soil amendments		Impairment of visual quality through use of recommended grading/erosion materials and techniques	Professionally prepared instruction manuals showing how materials and techniques should be used	X	X			
Potential improvement in visual quality resulting from more and/or different vegetative cover		Increased use of natural resources, including energy	Consider conservation of resources during design and construction	X		X		
Slight potential increase in ground water recharge		Construction delays	Streamline permit process, simplify procedures, and encourage agency coordination	X				
Slight potential reduction in flood hazards		Potential for increased public resentment of government regulations	Develop public information program	X				
Reduced potential for erosion of stream channels resulting from decrease in flow volumes.		Time and costs for preparing ordinances and associated public hearings, staff reviews, final adoption, and distribution	Increased levy on building permits	X	X	X		
		Increased administrative and enforcement costs	Savings accruing from reduced erosion/sedimentation	X	X	X		
			Develop public information program					
			See following mitigant					
		Increased development costs requiring private investment transferred to the buyer or tenant.	In-depth cost/benefit studies to determine effectiveness of the action.	X	X	X		
Action 9: Distribute homeowner's guides for new developments containing information on erosion control and prevention of landsliding.		See Actions 7 and 8 above.	Decrease in supply of sediments transported to the ocean resulting in beach deterioration	Artificial augmentation of beaches	X	X		
			Potential increase in stream channel erosion with clearer water flows	Case-by-case analysis of total effects of reduced volumes and clearer water flows	X			
			Increased use of natural resources including energy	Consider conservation resources during design and construction	X		X	
			Impairment of visual quality through use of recommended grading/erosion materials and techniques	Professionally prepared instruction manuals showing how materials and techniques should be used	X	X		
	Costs for preparing and distributing information.		Secure cooperation from lenders and public agencies in displaying and/or distributing information.	X	X	X		
Action 10: Conduct special education and training programs in erosion and sediment control application for the construction industry and local governments.	See Actions 7 and 8 above.	See Action 9 above.	See Action 9 above.	See Action 9 above.				
		Estimated costs — \$107,500.		X				
AGRICULTURAL PRACTICES								
Action 11: Develop and adopt an ordinance that requires resource conservation plans for all areas in agricultural use.	Improved ground water quality resulting from recommended irrigation methods according to Soil Conservation Service	Potential decrease in agricultural productivity resulting from reduced fertilizer use	Information, training, and assistance to increase efficient use of fertilizers	X	X			
	Water and energy conservation with recommended irrigation methods	Potential salt buildup in soil if irrigation practices not administered properly and carefully monitored	Develop public information and monitoring programs	X	X			
	Improved water quality through retrieval of tail water	Potential increased resentment of government regulation	Develop public information program	X				
	Maintenance of soil productivity through erosion control tactics.	Increased costs totaling approximately \$640,000	Low-cost government loans	X	X	X		
		Capital investments; training, labor, educational and publicity programs; planning and management; regulation and enforcement; and continued research and testing, requiring both public and private investment.	Formation of cooperatives	X	X	X		
Action 12: Expand Resource Conservation Plans to be consistent with 208 Plan Best Management Practices for agriculture.	See Action 11 above.	See Action 11 above.	See Action 11 above.	See Action 11 above.				
		Estimated costs — \$99,000.		X	X	X		
Action 13: Develop long-range Best Management Practices and implementation strategies for dairy wastes in the Chino Valley.	← No direct impacts anticipated without provisions for implementation →							
SALINE WATER INTRUSION								
Action 14: Maintain existing management programs for control of saline water intrusion.	← No direct impacts anticipated →							

Irreversible Commitment of Resources Expected from Changes in Land Use and Development Productivity				Growth-Inducing Impacts			
Recommended Actions	Beneficial Impacts	Adverse Impacts	Mitigation Measures	Unavoidable Adverse Impacts			
CONSISTENCY OF MUNICIPAL WASTEWATER FACILITIES WITH THE AREA-WIDE GROWTH PROJECTION							
<u>Action 15:</u> Plan, design, and construct the facilities necessary to meet the municipal waste treatment systems needs shown in the 1978-1979 SWRCB Clean Water Grant Priority List, consistent with the wastewater flow forecasts shown in Table IV-6A.	Reduce public health hazards and water quality problems	Increased effluent discharges to the marine environment resulting in increased turbidity, changes in water temperature, and potential alteration of benthic habitat	Secondary treatment (partially effective)	X			Growth-inducing to the level of the SCAG-78 Growth Forecast
	Facilitates attainment of effluent standards						
	Increased availability of aquatic habitat	Increased concentration of fertilizer salts and heavy metals and reduced organic nutrients with secondary treatment of wastewater	Implementation of enclosed bays and estuaries policy	X			
	Increased solid substrate for marine organisms		Appropriate exercise of authority for waiver of secondary treatment requirements coupled with industrial pretreatment				
	Increased availability of wastewater for reuse						
	Increased ground water recharge in Reach 3 of the Santa Ana River	Increased sewage sludge volumes with secondary treatment of wastewater	Implementation of wastewater solids management plan (LA/OMA Project)	X	X		
	Increased effluent treatment capacity	Tertiary treatment required upon attainment of continuous flows in Reach 4 of the Santa Ana River	Regional tertiary treatment facility	X			
	Increased employment opportunities.		Upgrade existing treatment plants				
			Revise SCAG-78 Growth Forecast				
		Potential seasonal algae blooms and attendant odor problems in aquatic environments		X			
		Localized odor problems and increases in carbon monoxide during treatment plant operations	Inspection and maintenance (partially effective)	X	X		
			Enclosed facilities				
			Emission control devices				
		Consumption of natural resources and energy during treatment plant operations	Production of methane gas by treatment plant digesters (partially effective)	X	X	X	
		Potential loss of wildlife habitats in siting treatment plants	Careful site selection	X	X	X	
		Potential changes in visual character/incompatibility of treatment plants with surrounding areas	Careful design and landscaping (partially effective)	X	X		
		Localized increases in dust, noise, traffic, and erosion/sedimentation; and consumption of electricity, gas, and diesel fuel during construction of treatment plants	Implement dust control practices at construction site	X			
			Noise abatement devices (partially effective)				
			Implementation of proper construction and grading practices.				
		Construction costs of approximately \$1,429,000,000 requiring public investment.		X	X	X	
<u>Action 16:</u> Prepare the 1979-1980 Clean Water Grant Priority Test to provide for funding of the municipal facilities in the South Coast Planning Area on a schedule consistent with the wastewater flow forecasts shown in Table IV-6A and the dates indicated on Table IV-6B.	Projects with near-term needs would be given highest priority in accordance with uniform effluent standards	Potential preemption of funds to previously recognized high priority projects.	Disallowing preemption of Priorities A through D.				
	Economies of scale through emphasizing expansion in developed areas						
	Encourages urban in-filling.						
<u>Action 17:</u> Revise NPDES permits to ensure that permitted wastewater flows are consistent with the flows shown in Table IV-6A for the time period of the permit.	Ensures environmental impacts would not exceed those identified for Action 15	Potential restriction of growth in areas with population trends not consistent with that projected in the SCAG-78 Growth Forecast.	Increased water conservation				
	Prevents premature commitments to ultimate treatment plant capacity.		Increased reuse of water				
			Revision of SCAG-78 Growth Forecast.				
WASTEWATER FACILITIES PLANNING AND AIR QUALITY MANAGEMENT COORDINATION							
<u>Action 18:</u> Plan, design, and construct wastewater facilities consistent with Air Quality Management Plan.	Increases potential for attainment of air quality standards by 1987	Diversion of facility planning funds from other purposes		X			
<u>Action 19:</u> Assist in the implementation of the Air Quality Management Plan.	Decreases potential for loss of federal funding for treatment plant construction	Adverse impacts resulting from implementation of AQMP tactics identified in AQMP DEIR.	See AQMP DEIR.				See AQMP DEIR
<u>Action 20:</u> In the preparation of Environmental Impact Reports and Statements (EIRs/EISs) for municipal wastewater facilities, specify as mitigation measures for air quality impacts those tactics and strategies adopted as part of the Air Quality Management Plan.	Beneficial impacts resulting from implementation of AQMP tactics identified in AQMP DEIR.						
UNSEWERED AREAS							
<u>Action 21:</u> Plan, design, and construct package treatment plants for beachfront Malibu and part of the Malibu Civic Center area.	Improved water quality through prohibiting septic tanks in unsuitable areas	Potential health hazard with accidental leaks or breaks in high-pressure sewage collection system		X			
	Decrease in public health risks from septic tank failure	Consumption of natural resources and energy during treatment plant operations		X	X	X	
	Reduces ground water contamination in areas with high water tables	Potential disturbance of oak woodland north of Pacific Coast Highway	Careful site selection	X	X	X	
	Increases potential for water reuse.	Changes in visual character/incompatibility of treatment plants with surrounding area	Careful design and landscaping (partially effective)	X	X		
		Potential increase in fire hazards during construction and operation of community treatment plants	Appropriate equipment modifications (partially effective)	X			
		Localized increases in dust, noise, traffic, and erosion/sedimentation; and consumption of electricity, gas, and diesel fuel during construction	Increase moisture content of soil	X			
			Noise abatement devices (partially effective)				
			Implementation of proper construction and grading practices.				
		Construction costs of approximately \$7,240,000; potential Tapia pumping facility, \$455,000, both requiring local public investment.		X	X	X	
<u>Action 22:</u> Create onsite wastewater management zones in the Malibu/Topanga area pursuant to the Behr Bill (SB 430).	Prevention of future problems from periodic pumping and inspection of septic tanks	Increased pumping of septage requiring disposal and/or reuse		X	X		
	Maximizes operating efficiency	Localized air emissions with increased treating of septage	Construction of Tapia treatment plant (partially effective)	X			
<u>Action 23:</u> Develop and implement septic tank management approaches for each onsite waste management zone.	Reduces potential for tank failure and attendant effluent contamination of water supplies and public health risks	Periodic increases in noise during pumping of septic tanks	Noise abatement devices (partially effective)	X			
	Localized improvement in air quality from reduction of odors	Increased costs to homeowners		X	X	X	
	Funding for future studies substantiating the need and feasibility for alternatives to septic tanks	Significant inconvenience to homeowners during unearthing of septic tanks		X			
	Documents septic tank conditions for prospective buyers	Reduced suitability for development resulting from stricter siting regulations		X	X		
	Stimulation of local septic tank pumping industry.	Potential for increased public resentment of government regulations	Assessment of associated cost/benefits of contemplated actions	X			
			Develop public information program				
		Associated planning costs of approximately \$69,000 requiring local public investment.		X	X	X	
<u>Action 24:</u> Revise the fiscal year 1978-79 Clean Water Grant Project Priority List for the Malibu area wastewater facilities.	← No significant change anticipated →						

Recommended Action	Beneficial Impacts	Adverse Impacts	Mitigation Measures	Unavoidable Adverse Impacts	Short-Term Use Limitations, Productivity	Irreversible Commitment of Resources	Growth-Inducing Impacts
HABITAT RESTORATION							
Action 32: The California Department of Fish and Game has commenced implementation of the Pilot Marsh Restoration Project (PMRP) which shall be completed by January 1980. The estimated cost for this project is \$540,000. Funds shall be provided by the state of California and shall be administered by the Department of Fish and Game.	Biological enhancement of estuarine environment resulting from increased tidal prism	Potential increase in erosion resulting from increased tidal prism		X			
	Provides 200-300 acres of wetland habitat, especially benefiting migratory and resident birds	Temporary disruption/destruction of animal habitats in general area of saltpan during dredging and dike removal; destruction of Horned Lark habitat	Analysis to determine the significance of eliminating saltpan	X		X	
	Potential, unquantified benefit to rare/endangered Light-Footed Clapper Rail, Belding's Savannah Sparrow, the California Least Tern, and the California Brown Pelican	Complete ecological restoration/productivity potentially limited by presence of people and recreational activities	Limitations imposed on pedestrian traffic, boating, and fishing	X			
	Provides educational and scientific program(s) for visitors.	Increase in suspended toxic substances; reduction in photosynthesis, clarity, O ₂ ; changes in temperature, pH, feeding habits, and hydrological patterns; redeposition of sediments with effects on primary producers and bottom organisms; and potential navigational problems during and/or resulting from dredging	Restriction of dredging to saltpan area	X			
		Consumption of energy during dredging		X	X	X	
		Potential temporary increase in air pollution during dredging	Emission control devices (partially effective).	X			
		Estimated construction costs for PEH — \$2-\$3 million; PMRP — \$540,000.		X	X	X	
Action 34: On completion of the PMRP, the Department of Fish and Game shall improve the lower portion of the upper bay to enhance wildlife habitat, increase circulation, and decrease stagnation.	Potential improvement in tidal circulation and flushing	Disruption of birds and spawning fish (February through August) during channelization	Schedule dredging to avoid breeding season, obtaining required information through additional studies if necessary	X			
	Potential improvement in nesting habitats on North Island resulting from restricted access.	For additional dredging impacts and costs, see Actions 32 and 33 above.	For associated mitigants, see Actions 32 and 33 above.				
Action 35: On completion of the PMRP, the Department of Fish and Game shall, when sufficient data is available from the PEH or PMRP, improve the saltpan and subtidal areas. The schedule for attaining the final configuration is 10 to 20 years and the anticipated cost is approximately \$10 million (1978). Funding shall be provided by state, federal, and/or other funding sources and administered by the Department of Fish and Game.	See Actions 32 and 33 above.	See Actions 32 and 33 above	See Actions 32 and 33 above.				
		Estimated cost — \$10 million.		X	X	X	
Action 36: The California Department of Fish and Game, with assistance provided by the OCEMA, UCI, and other monitoring agencies, shall assess the efficiency of upstream sediment controls and develop a program for management of sediment reaching the bay. The anticipated yearly cost of this program is estimated to be \$200,000 (1978) per year. Funding for this program shall be provided by state, federal, or other sources and administered by the Department of Fish and Game.	Protects investment required for implementing PMRP and PEH.	For dredging impacts see Actions 32 and 33 above Annual cost estimated to be \$200,000.	For associated mitigants see Actions 32 and 33 above.	X	X	X	
SEDIMENT AND EROSION CONTROL							
Action 37: Each appropriate jurisdiction within the Newport Bay watershed shall finance the development, adoption, and enforcement of a grading ordinance or regulations for those portions of its area in the Newport Bay watershed. These ordinances or regulations shall be at least as stringent as the SCAG areawide model grading ordinance as amended by NIWA, and shall be implemented within six months of the adoption of the 208 Plan.	See Action 7 in Construction Activities section, Nonpoint Source Waste Management Plan.	See Action 7 in Construction Activities section, Nonpoint Source Waste Management Plan Approximately 17 additional inspectors required at an estimated additional annual cost of \$680,000; personnel retraining required approximately every five years Additional costs associated with stricter standards, reduced housing densities, landscape maintenance, fees, security bonds, etc.	See Action 7 in Construction Activities section, Nonpoint Source Waste Management Plan.				
				X	X	X	
					X	X	X
Action 38: The Regional Water Quality Control Board will set objectives for sediment discharge from agricultural lands and the Orange County Resource Conservation District shall develop and promote adoption of best management practices (BMPs) for the reduction of erosion consistent with these objectives. The Orange County Environmental Management Agency shall design and maintain its flood protection facilities to minimize sediment transport from sheet erosion of agricultural fields. (condensed wording)	See Actions 11, 12, and 13 Agricultural Practices section, Nonpoint Source Waste Management Plan.	See Actions 11, 12, and 13 Agricultural Practices section, Nonpoint Source Waste Management Plan Associated costs (undetermined).	See Actions 11, 12, and 13 Agricultural Practices section, Nonpoint Source Waste Management Plan.				
				X	X	X	
Action 39: The Orange County Environmental Management Agency shall, where proven reasonably practicable, provide dams for sediment and flow retention in the Lomas de Santiago. (condensed wording)	Reduction in sedimentation approximately 3 percent with two Hicks dams; 14 percent with all 13 dams	Inundation hazard resulting from potential for dam failure or sudden release of water	Site analysis, planning, design, construction supervision, inspection, and maintenance				
	Reduced flood hazards	Potential effects on some biotic life resulting from reduced sediment/nutrients reaching Newport Bay	Planned studies to identify sediment sources, relative contribution, means of transport, and effective management. Should also investigate effects of various sedimentation rates on estuarine biota	X			
	Benefits to biotic life in bay						
	Increased employment opportunities for construction workers and planners.						
		Elimination of riparian communities resulting from construction of dams	Cost/benefit studies	X	X	X	
		Slight decrease in sediment for beach replenishment	Artificial augmentation	X			
		Potential disturbance/destruction of archaeological and/or paleontological sites during construction of dams, roads, storage yards, borrow pits, etc.	Preconstruction surveys, salvage, and monitoring	X	X	X	
		Probable significant change in visual character/incompatibility with surrounding areas	Minimize visibility Screening with vegetation compatible with existing surroundings Early consultation with landscape architect(s)	X	X	X	
		Slight increase in traffic congestion and air pollution if debris trucked to landfills		X			
		Increased erosion/sedimentation during construction	Observance of grading ordinances and regulations.	X			
Action 40: Stabilize flood control channels in the San Diego Creek system. (condensed wording)	Potential effects on some biotic life resulting from reduced sediment/nutrients reaching Newport Bay	Decrease/prevention of ground water recharge if channels lined	Eliminate use of liners in selected areas	X	X		
	Reduces sedimentation in Newport Bay	Potential effects on some biotic life resulting from reduced sediment/nutrients reaching Newport Bay	For associated mitigants see Action 39 above				
	Increased employment opportunities	Slight decreases in sediment for beach replenishment	Artificial augmentation	X			
	Potential increase in ground water recharge from some methods of stabilization	Potential increase in flood hazard if velocity decreased (decreased capacity)					
	Flood hazards reduced by increased flow velocities in channel (increased capacity).	Slight potential disturbance/destruction of archaeological and/or paleontological sites	Preconstruction survey	X			
		Probable change in appearance depending on materials used	Vegetative screening Integration with surroundings Early consultation with landscape architect	X	X		
		Increase erosion to storm channels from construction	Observance of erosion control ordinances	X			
		Associated, undetermined costs.		X	X	X	
Action 41: Upstream improvements and administrative controls may not adequately control all of the sediment transported from the watershed. Therefore, the reach of San Diego Creek from Jamboree Road to the San Diego Freeway shall be maintained in such a manner so as to maximize its erosion control potential consistent with its intended purpose of flood control protection.	Potential effects on some biotic life resulting from reduced sediments/nutrients reaching Newport Bay	Potential effects on some biotic life resulting from reduced sediments/nutrients reaching Newport Bay	For associated mitigants see Actions 40 and 41 above				
	Reduced sedimentation of Newport Bay	Potential change to areas' visual character	Screening with vegetation compatible with existing surroundings	X			
	Increased employment opportunities.	Increased erosion/sedimentation during construction	Observance of grading ordinances and regulations	X			
		Slight decreases in sediment for beach replenishment	Artificial augmentation.	X			
		Associated costs in excess of \$200,000.		X	X	X	
Action 42: As an additional element of the continuing action program, NIWA shall assess the need and/or feasibility of downstream desilting basins. The following items shall be addressed in this assessment: A. The need for a downstream sedimentation basin(s) with all other programs being implemented and in place (e.g., grading ordinances, BMPs, in-channel sediment management). B. Identify alternative sites for downstream sediment control basins. Sites "A" and "B", identified in the Phase II Subtask 5 report shall also be included as alternative sites. C. The effectiveness of each site in sediment removal at various flow rates shall be assessed. D. The costs of construction and maintenance of each alternative site shall be evaluated. These costs shall include not only the direct costs of construction and maintenance, but also the indirect costs to both the surrounding communities and private interests as a result of development of each site.	No direct impacts anticipated						

Recommended Action	Beneficial Impacts	Adverse Impacts	Mitigation Measures	Unavoidable Adverse Impacts	Short-Term Use/Long-Term Productivity	Irreversible Commitment of Resources/Environmental Changes	Growth-Inducing Impacts
SURFACE SANITATION							
<u>Action 43:</u> At the expiration of existing street sweeping contracts, or as existing mechanical equipment is retired, each appropriate jurisdiction shall obtain vacuum or combination vacuum/mechanical street sweeping equipment. The final mix of mechanical and vacuum equipment shall provide a balanced street cleaning program. The optimum mix of equipment shall be attained no later than eight years after specific guidelines are established in the 208 Plan for the use of various types of equipment in achieving water quality goals. The cost of this equipment will vary by jurisdiction, depending on the amount of vacuum equipment needed and the equipment chosen. Each jurisdiction shall finance these costs through local funding sources.	Benefits accruing to surface water runoff and visual character from containment of debris and potential pollutants	Increased localized noise levels	Implementation of noise abatement measures.	X			
		Associated costs (minor).		X	X	X	
	Increased efficiency in the removal of fine particulates resulting in less emissions to air						
	Generation of employment opportunities						
<u>Action 44:</u> Each jurisdiction shall modify existing street sweeping practices to attain the greatest water quality benefit based on season, refuse collection day, tree trimming operations (e.g., slower sweeping speeds, double passes where needed). This action shall commence immediately upon adoption of the 208 Plan. Costs are expected to be minimal and shall be financed by the implementing jurisdictions.	Improvements in water quality resulting from:	Increases in noise levels from more frequent street cleaning	Implementation of noise abatement measures	X			
	– intensified sweeping efforts during fall	Increased air pollutant emissions and energy consumption from greater sweeper VMT	Implementation of emission control devices.	X			
	– scheduling of sweeping activity to correspond with least interference	Public inconvenience from parking restrictions		X			
	– coordination with refuse collection	Associated costs with increased street sweeping frequency.		X	X	X	
<u>Action 45:</u> Each jurisdiction shall improve its streets within the NIWA area with curb and gutter, where needed, to facilitate removal of significant street pollutants. Costs will vary by jurisdiction. Financing of these costs shall be provided through local funding sources or as a condition of development.	– establishment of parking restrictions						
	Coordination with tree trimming activities reducing obstructions previously preventing debris removal close to curb						
	Visual character improvement in swept areas						
	Generation of employment opportunities.						
<u>Action 46:</u> Each jurisdiction shall identify areas within the watershed which are recurrently used as illegal dump sites and increase enforcement of applicable regulations. Costs for this activity will vary by jurisdiction and will be provided through local funding sources.	Facilitates removal of street debris and reduces surface water contamination	Construction-induced erosion, noise disturbance, and traffic congestion	Limit construction to dry months; institute noise abatement measures; schedule construction during off-peak hours.	X			
	Improves drainage and reduces potential problems associated with stagnating pools of water	Consumption of natural resources, including energy		X	X	X	
	Generation of employment opportunities.	Associated construction costs (undetermined).		X	X	X	
VESSEL WASTE MANAGEMENT	Improvement in surface water quality and reduction in ground water contamination	Increased demand for capacity at legal disposal sites	Encourage reuse of materials; energy recovery from discarded material.	X			
	Public health risks potentially reduced	Associated costs of enforcement (undetermined).		X	X	X	
	Improvement in visual character						
	Property values in areas adjacent to dump sites preserved						
<u>Action 47:</u> The Orange County Sheriff shall enforce existing laws requiring marinas to have accessible sewage pumpout capability. This activity shall commence immediately upon adoption of the 208 Plan. Costs of implementation are anticipated to be minimal and shall be financed by the County of Orange or its contractors.	Generation of employment opportunities.						No Growth Inducing Impacts Anticipated
	Reduction in the quantity of discharged human wastes and garbage providing benefits to water quality	Sewage pumpout facilities visually unappealing	Construction with a protective covering to disguise facility.				
	Public health hazards from exposure to pathogenic organisms reduced	Associated costs (undetermined).		X	X	X	
	Reduced unsafe conditions (explosion) in holding tanks by utilization of pumpout facilities.						
<u>Action 48:</u> The United States Environmental Protection Agency shall support development of a device for in-the-water hull cleaning of pleasure craft which incorporates a retaining bag to collect the material removed. When these devices are made available and proven effective and economical, the Regional Water Quality Control Board shall require their use for in-the-water hull cleaning. It is estimated that strict enforcement of these regulations will cost \$15,000 (1978) per year, to be borne by the State of California.	Reduced discharge of heavy metals and organic material to Newport Bay	Enforcement costs estimated at \$15,000 per year		X	X	X	
	Slows rate of trace metal buildup	Accrual of costs to boat owners (e.g., purchase of retaining bags).		X	X	X	
	Public health benefits by lessening contamination of edible shellfish						
	Visual character of bay improved						
<u>Action 49:</u> The City of Newport Beach and the County of Orange shall amend the existing maintenance agreement and increase its funding to provide for emergency cleanup of lower Newport Bay.	Potential employment benefits for enforcement activities.						
	Provides for rapid cleanup of spills; reduces potential for adverse impact on marine water quality and habitats						
	Reduction in amounts of floatable solids; improved water safety for water contact activities	Increases funds from existing \$15,000 total to \$20,000; jointly financed by County of Orange and city of Newport Beach.		X	X	X	
	Bay's visual character improved						
<u>Action 50:</u> The Southern California Association of Governments shall develop and implement public education programs designed to reduce vessel-related pollution.	Potential water quality improvements of bay (see Actions 47, 48, and 49).	Range of estimated program costs \$34,300 to \$52,300; funded by Section 208 (PL-92-500).		X	X	X	
<u>Action 51:</u> Working with the EPA, U.S. Coast Guard, State Water Resources Control Board, Orange County Sheriff and any other appropriate governments, NIWA shall define the duties and authorities of such entities, to enforce existing state and local regulations in Newport Bay, and to cooperatively develop an enforcement program. Such programs shall thereafter be available for use by the implementing and enforcing entities as well as for use in developing the public educational programs.	See Actions 47, 48, and 49.	Associated costs (undetermined).		X	X	X	
<u>Action 52:</u> Determine the source(s) of bacterial contamination to upper Newport Bay and develop appropriate mitigation measures.	← No direct impacts anticipated →						
<u>Action 53:</u> Determine the source(s) and impacts of the high nutrient levels entering upper Newport Bay via San Diego Creek and, where needed, develop appropriate mitigation measures.	← No direct impacts anticipated →						
<u>Action 54:</u> Assess the impacts of pollutants entering upper Newport Bay via storm drains and the Santa Ana-Delhi Channel and, where needed, develop appropriate mitigation measures.	← No direct impacts anticipated →						
<u>Action 55:</u> Task 2-3: Ongoing UCI continuing action study: A. Water quality monitoring in the major channels shall be performed to determine the pollutant inputs to upper Newport Bay. B. An intensive water quality survey shall be performed to determine detailed information regarding runoff quality and quantity from major land use types. C. A special sediment transport analysis shall be performed to determine the amount of sediment which is carried from the watershed into upper Newport Bay.	← No direct impacts anticipated →						

**SUMMARY OF DRAFT 208 PLAN ACTIONS
Attachment A**

DRAFT 208 PLAN ACTIONS	Area-wide Action (1)	Subregional Action (2)	Schedule	Management Agency	Description	Costs	Financing Alternatives
SECTION 2.1: NONPOINT SOURCE WASTE MANAGEMENT PLAN						\$250,000.	208 funds and local match
Develop and implement a comprehensive area-wide-local contingency plan for spills of hazardous substances.	X		2/79 - 7/79	Area-wide Planning Agency/Study Group	Develop and implement a comprehensive contingency plan in which a lead agency is designated and authority and responsibility are delegated among involved agencies.	L.A. Co. - \$650,000/yr./5yrs. Orange Co. - \$36,600 Riverside Co. - no cost San Bernardino - \$21,000	N/A
Implement specific subregional actions for containment and clean-up of hazardous substance spills as described in the Nonpoint Source Waste Management Plan.		X	10/78-6/79	Los Angeles, Orange, Riverside and San Bernardino Counties and City of Los Angeles	Includes actions such as improved emergency communications, emergency clean-up funding and public information programs.	Costs undetermined at this time	N/A
Maintain existing street sweeping programs with consideration given to increasing program effectiveness.	X		ongoing	All cities and counties	Possible methods for increasing program effectiveness are: vary frequency by type of area (i.e., residential vs. industrial); different equipment (i.e., vacuum sweepers); sweeper speeds; sweeper passes; parking restrictions.	Costs undetermined at this time	N/A
Maintain current litter control programs.	X		ongoing	All cities and counties	None	Costs undetermined at this time	N/A
Maintain current catchbasin and storm drain cleaning programs with consideration given to increasing program effectiveness.	X		ongoing	All City Sanitation Departments and County Flood Control Districts	Possible methods for increasing program effectiveness are: clean before rainy season; utilization of modern eductor equipment; increase frequency of catchbasin cleaning from once to twice a year.	Costs undetermined at this time	N/A
Emphasize reduction of runoff volume and peak flow rates as mitigation measures in environmental impact reports (EIRs) for new developments.	X		ongoing	Selected cities and counties in South Coast Planning Area	Reduction of runoff volume and peak from new developments can help maintain existing water quality and biological communities, and help achieve additional recharge capacity in developing areas.	Costs undetermined at this time	N/A
Strengthen existing grading control ordinances, by 1) adopting specific ordinances for areas requiring water quality control, which are to be at least as effective as the Model Erosion and Sedimentation Control Measures for Grading Ordinances guidelines in Appendix B and/or 2) adopting the Model Erosion Control Ordinance in Appendix C.	X		by 10/79	Selected City and County Building and Safety Departments Identified in the Plan (See Section 2.1, Table 7)	None	\$437,000./yr.	Local and/or development fees
Stringently enforce erosion and grading control ordinances in areas identified in the Nonpoint Source Waste Management Plan	X		by 10/79	Selected City and County Building and Safety Departments Identified in the Plan (See Section 2.1, Table 7)	None	Costs undetermined at this time	N/A
Distribute homeowner's guides in new developments, containing information on erosion control and prevention of landslide	X		by 10/79	Selected City and County Building and Safety Departments Identified in the Plan (See Section 2.1, Table 7)	None	\$10,000/yr.	Local Funds
Conduct special education and training programs in erosion and sediment control application for the construction industry and local governments.	X		by 9/79	Counties of Los Angeles, Orange, San Bernardino, Riverside, and Ventura, City of Los Angeles, CALTRANS, State Department of Conservation, and Resource Conservation District	None	\$107,500.	Local, state and federal sources
Develop and adopt an ordinance that requires Resource Conservation Plans for all areas in agricultural use.	X		by 2/80	County Board of Supervisors with concurrence from Resource Conservation Districts	Resource Conservation Plans (RCPs) are currently prepared only at the request of an agricultural operator. Nonpoint source pollution would be reduced if RCPs were required to be prepared and implemented for all areas in agricultural use.	\$20,000 per county	208 Continuing Planning Funds and local match
Expand Resource Conservation Plans to be consistent with 208 Plan Best Management Practices for agriculture.	X		2/79-2/82	Resource Conservation Districts with USDA Soil Conservation Service	Best Management Practices in the 208 Plan are derived from EPA and Resource Conservation District techniques as appropriate to 208 planning area. These BMPs should be consistent with the management practices contained in the conservation plans.	\$99,000	208 Continuing Planning funds, local match and possible federal funding under Rural Clean Water Program
Develop long-range Best Management Practices and implementation strategies for Dairy Wastes in the Chino Valley.	X		by 2/80	Santa Ana Watershed Project Authority (SAWPA), San Bernardino County, Riverside County with assistance of Resource Conservation Districts	None	\$200,000	Step I Facilities Planning Grant; 208 Continuing Planning Funds; and local match
Maintain existing management programs for control of saline water intrusion.	X		ongoing	LACFCD, Orange County Water District	Current seawater intrusion barriers and watermaster service must be maintained for the coastal aquifers. The safe-yield and conjunctive use policy in the San Fernando groundwater basin should be maintained.	Costs undetermined at this time	N/A
SECTION 2.2: MUNICIPAL AND INDUSTRIAL WASTE TREATMENT MANAGEMENT PLAN							
Plan, design and construct the facilities necessary to meet the municipal waste treatment system needs shown in the 1978/1979 SWRCB Clean Water Grant Project Priority List, consistent with the wastewater flow forecasts shown in the Municipal/Industrial Waste Management Plan.	X		1979-2000	Existing agencies (local governments and Special Districts) on the Clean Water Grant Project Priority List. (See Section 2.2, Table 12)	The Municipal and Industrial Waste Treatment Management Plan contains 20-year forecasts of population and wastewater flows, based on the SCAG-78 growth forecast plans. The plan impacts wastewater flow with existing and presently planned wastewater treatment plant capacities. Future facilities planning will need to adjust presently planned capacities to be consistent with population and wastewater flow forecast in the plan.	\$1,428,943,000 (5 year total) Cost estimate based upon 1978-1979 Clean Water Grant - Priorities	Clean Water Grant - 75% of construction costs (85% for alternative/innovative technology); State Clean Water Grant - 12.5% of construction costs; Local - 12.5% of construction costs
Prepare the 1979-1980 Clean Water Grant Project Priority List to provide for funding of the municipal facilities in the South Coast Planning Area on a schedule consistent with the wastewater flow forecasts and the dates shown in the Municipal and Industrial Waste Treatment Management Plan.	X		by 6/79	Los Angeles, Santa Ana and San Diego Regional Quality Control Board; State Water Resources Control Board	Consistently should be established using the following guidelines: Facilities in locations where capacities are being approached and are expected to be exceeded by 1985 should be given higher priority than other capacity expansions; Other facility expansions to meet capacity needs during the period 1980-2000 should be ranked to insure that facilities are on the line at the time capacities are reached.	Costs undetermined at this time	N/A
Revise NPDES permits to insure that permitted wastewater flows do not exceed the flows shown in the Municipal and Industrial Waste Management Plan for the time period of the permit.	X		1979-1984	Los Angeles, Santa Ana and San Diego Regional Water Quality Control Boards	Permits will be reviewed for consistency. Under most circumstances, they should be modified at time of renewal. Where serious discrepancies exist between flows currently permitted and those shown in the Plan, these should be reviewed on a case-by-case basis.	Costs undetermined at this time	N/A
Plan, design and construct wastewater facilities consistent with the Air Quality Management Plan (AQMP).	X		ongoing	Existing agencies (local governments and Special Districts) on the Clean Water Grant Project Priority List.	None	Costs undetermined at this time	N/A
Management agencies responsible for the planning of municipal (publicly-owned) wastewater facilities shall, in the preparation of environmental impact reports and statements (EIRs and EIS), specify as mitigation measures for air quality impacts those tactics and strategies adopted as part of the Air Quality Management Plan.	X		1979-2000	Existing agencies (local governments and Special Districts) on the Clean Water Grant Project Priority List (See Section 2.2, Table 12)	The AQMP will contain recommended air quality tactics and strategies for 201 facility planning areas. The EIRs/EISs prepared for facilities plans should, under mitigation measures for growth-related air quality impacts, specify appropriate AQMP tactics and strategies.	Costs undetermined at this time	N/A
Assist in the implementation of the Air Quality Management Plan.	X		1979-2000	Existing agencies (local governments and Special Districts) on the Clean Water Grant Project Priority List (See Section 2.2, Table 12)	As part of the facilities planning process, management agencies should inform local decision-makers of the significance of implementation of the Air Quality Management Plan for Clean Water Grants.	Costs undetermined at this time	N/A
Plan, design and construct package treatment plants for beachfront Malibu and part of the Malibu civic center area.	X		1979/Plan 1980-81/ Design 1981-82/ Construct	Los Angeles County Engineer	Small community sewer systems (e.g., pressure sewers) and three wastewater treatment and disposal systems should be planned, designed and constructed for this area.	\$7,240,000	Clean Water Grants are available to cover 87.5% of the project costs (97.5% of the project is determined to use innovative/alternative technology). Local match may be obtained through revenue bonds or special assessments.
Create On-Site Wastewater Management Zones in the Malibu/Topanga Area pursuant to the Behr Bill (SB 430).	X		1978-1979	Los Angeles County Board of Supervisors	OSWMZs should be created for the following areas: beachfront properties; Civic Center-Serra Road; Monte Nido; coastal hillsides, inland of Pacific Coast Highway; Point Dune Headlands; Zuma Canyon; and Topanga Fernwood.	\$8,000	208 Continuing Planning Funds
Develop and implement septic tank management approaches for each on-site waste management zone.	X		1979	OSWMZs (Los Angeles County Engineer)	The newly formed OSWMZs should conduct engineering and planning studies appropriate for each area. This should include analysis of a septic pumping facility to the Tapia Water Reclamation Plant (cost of this facility would be approximately \$465,000).	\$61,000	Clean Water Grants at 87.5%
Revise the Fiscal Year 1978-79 Clean Water Grant Project Priority listing for the Malibu area wastewater facilities.	X		before 6/79	Los Angeles Regional Water Quality Control Board, State Water Resources Control Board	Revise project description, add Step I activity and schedule Step II and III for package treatment plant.	Costs undetermined at this time	N/A
SECTION 2.3: WATER CONSERVATION AND REUSE							
Maintain current stormwater conservation programs.	X		ongoing	Los Angeles, Orange, Riverside and San Bernardino Flood Control Districts	None	Costs undetermined at this time	N/A
Develop a long-range plan and implementation strategy to increase wastewater reuse in Los Angeles and Orange Counties through the Orange and Los Angeles Counties Water Reuse Study	X		1978-1981	Los Angeles/Orange County Regional Reuse Study Management Board	The Los Angeles/Orange Counties regional reuse study is responsible for plan and implementation strategy development.	Separately funded program - no additional costs	N/A
Adopt the 208 Plan water conservation and reuse policies as the policy framework for the Los Angeles/Orange County Reuse Study.	X		prior to 2/79	Los Angeles/Orange County Regional Reuse Study Management Board	As part of the 208 Plan approval and adoption process, the Management Board for the regional reuse study should adopt the 208 Plan, water conservation and reuse policies to assure, from the outset, consistency of the study with the 208 Plan.	No additional costs	N/A
SECTION 2.4: RESIDUAL WASTE MANAGEMENT PLAN							
Develop a long-range wastewater sludge management plan and implementation strategy for the Los Angeles/Orange County Metropolitan Area through the LA/QMA Project	X		ongoing adopted by 12/79	LA/QMA Project is responsible for plan and implementation strategy development	The LA/QMA Project is a Step I facilities planning study which is charged with developing a long-range wastewater sludge management plan by 1989. Alternative sludge management projects are currently being investigated. The adopted sludge plans will be incorporated into the 208 Plan.	Separately funded program - no additional costs	N/A
Develop and implement a strategy for permanently closing the Stringfellow Class I hazardous waste disposal site.	X		2/79-2/80 Develop Strategy 2/80-8/80 Implement	Riverside County and RWQCB (8)	Hazardous waste disposal operations at the Stringfellow site were suspended in 1972, due to groundwater contamination. Site owners cannot comply with RWQCB abatement orders due to bankruptcy. A proposal to achieve legislative funding for site closure has been submitted but is not expected to be funded. Development and implementation of a strategy with a high probability of success is needed.	\$30,000 - develop strategy \$500,000 - \$1,000,000 / implement strategy \$36,000/yr. after closure	Local funds, or funds provided by pending legislation (AB 1130)
Suspend the granting waste disposal permit exemptions by local solid waste enforcement agencies for Class III landfills	X		ongoing	Solid waste enforcement agencies designated pursuant to AB 2439.	Section 18215, Chapter 5, Division 7, Title 14 of the California Administrative Code allows solid waste enforcement agencies to exempt Class III landfills from the solid waste permits required for Class I and II landfills. The granting of these exemptions may result in decreased inspection and monitoring at these sites. This may lead to potential groundwater quality impairment by providing opportunities for depositing Group II wastes.	\$1,000/yr./ non-exempt site	Local funds: general fund revenues, permit fees
Require groundwater quality monitoring and other monitoring program improvements at Class III sanitary landfills.	X		10/79-10/80	RWQCB (4A/B) (8) (9)	Class III landfills represent the majority of landfills operated in the South Coast area. It is known that some Group II wastes are received at these sites. Requiring groundwater quality monitoring and additional inspection monitoring particularly for those sites where wastes are discharged directly to water, would allow for early detection of water quality impairment.	RWQCB: \$200 monitoring program \$200/gr/site. Site operators: \$800/yr.	State funding, permit fees
SECTION 2.5: INTEGRATED CONTROL PLANS FOR NEWPORT BAY							
Habitat Restoration							
1) Implement pilot marsh restoration project (PMRP).	X		by 1980	Department of Fish and Game (DFG)	Intended to restore wildlife habitat in Upper Newport Bay.	\$540,000	State of California administered by DFG
2) On completion of the PMRP: a) establish Protected Experimental Habitat (PEH), b) improve lower portion of upper bay to increase circulation and decrease stagnation, c) improve salt pan and subtidal areas.	X		1980-2000	DFG	Intended to restore wildlife habitat in Upper Newport Bay.	\$10,000,000 (est.)	State of California through DFG
3) Assess efficiency of upstream sediment controls and develop program for management of sediment reaching the Bay.	X		ongoing	DFG in cooperation with Orange County EMA and UCI	Intended to restore wildlife habitat in Upper Newport Bay.	\$200,000/yr.	State of California through DFG
Sediment and Erosion Controls							
1) Develop, adopt and enforce grading ordinances at least as stringent as the SCAG model grading ordinance as amended by NIMA.	X		by 7/79	County of Orange, Cities of Costa Mesa, Irvine and Orange; Tustin, Santa Ana and Newport Beach	Present grading regulations have contributed to accelerated erosion and sedimentation in Upper Newport Bay.	Increased costs for inspection - \$680,000	Local
2) Develop and promote adoption of best management practices (BMPs) for reduction of erosion from agricultural lands.	X		N/A	Orange County RCD	Agricultural and undeveloped lands are a significant source of sediment to Upper Newport Bay through direct rainfall and drainage.	Costs undetermined at this time	Agricultural Cost Sharing Program
3) Provide dams for sediment and flow retention.	X		1990-2015	Orange County EMA	Additional structural facilities are needed for control of sediment.	\$4.2 million	State and Federal funding
4) Develop interim programs for stabilization of flood control channels	X		N/A	Orange County EMA	This will eventually become a federal responsibility	Costs undetermined at this time	Locally financed
5) Develop and implement sediment maintenance Plan for San Diego Creek.	X		by 6/79	NIMA	Maximum erosion control for San Diego Creek from Jamboree Road to San Diego Freeway.	\$200,000/yr.	N/A
Surface Sanitation							
1) Develop and implement an optimum mix of street-sweeping equipment.	X		by 1986	Orange County, Cities of Costa Mesa, Irvine, Newport Beach, Orange, Tustin and Santa Ana	Encourages purchase of vacuum or combination mechanical/vacuum equipment.	Variable by jurisdiction	Local
2) Modify street-sweeping practices for optimum efficiency.	X		2/79	Orange County, Cities of Costa Mesa, Irvine, Newport Beach, Orange, Tustin and Santa Ana	Changes in existing street sweeping practices will provide water quality benefits.	Minimal or no additional costs	Local
3) Modify local curbs and gutters to facilitate removal of significant street pollutants.	X		ongoing	Orange County, Cities of Costa Mesa, Irvine, Newport Beach, Orange, Tustin and Santa Ana	N/A	Variable by jurisdiction	Locally funded or by developers
4) Increase enforcement of illegal dumping regulations.	X		ongoing	Orange County, Cities of Costa Mesa, Irvine, Newport Beach, Orange, Tustin and Santa Ana	N/A	Variable by jurisdiction	Local
Vessel Waste Management							
1) Enforce existing laws requiring marinas to have accessible sewage pump-out facilities	X		2/79	Orange County Sheriff	N/A	Minimal cost	Orange County or its contractors
2) Develop and implement regulations relating to inwater hull cleaning practices.	X		by 12/79	RWQCB - Basin 8	As cost-effective and efficient techniques in-hull cleaning are developed the RWQCB should adopt appropriate regulations.	\$15,000/yr.	State of California
3) Increase Emergency Clean-up Fund for Lower Newport Bay.	X		2/79	City of Newport Beach, Orange County	Increase existing funds from \$15,000 to \$20,000 for removal of floating debris in Newport Bay Harbor.	\$5,000	Local funds
4) Develop and implement public education programs designed to reduce vessel waste pollution.	X		N/A	NIMA	Programs should include distribution of free literature.	Costs undetermined at this time	N/A
5) Cooperatively develop vessel waste enforcement programs and define duties and authorities for various local/state/federal agencies.	X		N/A	NIMA		Costs undetermined at this time	N/A

(1) Based upon work conducted by Southern California Association of Governments staff or consultants to SCAG.

(3) excludes \$1,428,943,000 5 year cost for wastewater facilities and Residual Waste Action Costs for groundwater quality monitoring at Class III landfills.

(2) Based upon work and recommendations of sub-regional Participation Agencies and their consultants.

(4) excludes annual costs for Residual Waste Costs for suspending waste disposal permit exemptions and groundwater quality monitoring at Class III landfills.

Total Initial Cost \$24,578,100
Total Cost Per Year \$1,548,000

(3)

(4)

U.C. BERKELEY LIBRARIES



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*Areawide Waste
Treatment Management
Planning Program*